

NATO Centres of Excellence and the Transformation of the North-Atlantic Alliance

Simion, Eduard

Veröffentlichungsversion / Published Version
Monographie / monograph

Empfohlene Zitierung / Suggested Citation:

Simion, E. (2016). *NATO Centres of Excellence and the Transformation of the North-Atlantic Alliance*. Oradea: University of Oradea Publishing. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-73403-8>

Nutzungsbedingungen:

Dieser Text wird unter einer Basic Digital Peer Publishing-Lizenz zur Verfügung gestellt. Nähere Auskünfte zu den DiPP-Lizenzen finden Sie hier:
<http://www.dipp.nrw.de/lizenzen/dppl/service/dppl/>

Terms of use:

This document is made available under a Basic Digital Peer Publishing Licence. For more Information see:
<http://www.dipp.nrw.de/lizenzen/dppl/service/dppl/>

Eduard Simion

**NATO CENTRES OF EXCELLENCE
AND
THE TRANSFORMATION OF THE
NORTH-ATLANTIC ALLIANCE**

**UNIVERSITY OF ORADEA PUBLISHING
- 2016-**

National Library of Romania

CIP no.

University of Oradea Publishing

CIP description of the National Library of Romania

SIMION, EDUARD

NATO Centres of Excellence and the Transformation of the North-Atlantic Alliance /

Simion Eduard – Oradea: University of Oradea Publishing, 2016

Bibliogr.

ISBN

This paper is the English version, updated and reviewed, of the homonym titled book "*Centrele de Excelență NATO și transformarea Alianței Nord-Atlantice*" published in 2013 at University of Oradea Publishing House, ISBN 978-606-10-0728-8

University of Oradea Publishing is recognized by CNCSIS, code 149.

Cover: Alin Kis

DISCLAIMER: This book expresses the views, interpretations, and independent position of the author. It should not be regarded as an official document, nor expressing formal opinions or policies, of NATO or the NATO HUMINT Centre of Excellence.

C O N T E N T

Introduction	...	6
1. NATO Transformation process. A brief introduction in the NATO Centres of Excellence topic	...	9
1.1 NATO Centres of Excellence – an emergent concept in its way to maturity	...	9
1.2 Global security and NATO	...	10
1.2.1 Global security challenges and the need of transformation in NATO	...	10
1.2.2 Prospection of the future security environment. The Multiple Futures Project	...	14
1.3 NATO transformation from the Strategic Concept perspective	...	18
1.3.1 Evolution of the new Strategic Concept of NATO – initial viewpoints of the Group of Experts	...	18
1.3.2 NATO Transformation and the new Strategic Concept	...	22
1.3.3 From the suggestions and recommendation of the group of experts to the new Strategic Concept. A comparative approach	...	26
1.3.4 Grounds of conceptual evolution in NATO	...	33
1.4 Transformation in NATO	...	34
1.4.1 The Allied Command Transformation (ACT)	...	36
1.4.2 Aspects of transformation in NATO	...	40
2. Subject approach and study methodology – between Geography and Security Studies	...	45
2.1 Argument	...	45
2.2 Working methodology	...	46
2.3 NATO Centres of Excellence –a shared approach	...	49
3. The Transformation Network and NATO Centres of Excellence	...	54
3.1 NATO Transformation Network	...	54
3.1.1 NATO Transformation Network - towards a new vision of organizational transformation	...	55
3.1.2 Structural and functional parameters of the Transformation Network	...	60
3.2 Allied Command Transformation and the NATO Transformation Network. Control and coordination considerations	...	63
3.2.1 The Allied Command Transformation –interface between NATO and the Transformation Network	...	63
3.2.2 NATO Partnerships and the Transformation Network	...	67
3.2.3 Control and coordination component of the Transformation Network	...	69
3.3 Viewpoints regarding NATO Centres of Excellence	...	70
3.3.1 NATO Centres of Excellence – general principles	...	71

3.3.2	NATO Centres of Excellence – functional sheets. Significances in the field of transformation	...	72
3.3.3	An analytical perspective regarding NATO Centres of Excellence	...	88
3.3.4	Emerging functional features in NATO Centres of Excellence activity	...	93
3.3.4.1	Custodianship role in the Centres of Excellence portfolio	...	93
3.3.4.2	The Quality Assurance stance in Centres of Excellence accreditation as NATO Education and Training Facilities	...	96
3.3.4.3	Department Head appointment for Centres of Excellence	...	98
3.3.4.4	Lessons Learned/ Best Practice Communities of Interest	...	99
3.3.4.5	Centres of Excellence commitment	...	100
4.	The NATO HUMINT Centre of Excellence from Oradea - views of institutional integration opportunities	...	103
4.1	Premises for establishing the NATO HUMINT Centre of Excellence	...	103
4.1.1	Fields of transformation – between emergence and necessity	...	103
4.1.2	Military intelligence – operational concepts. Intelligence from human sources	...	104
4.1.3	Why Romania? The establishment of NATO HUMINT Centre of Excellence – between geopolitical option and functional enablers	...	106
4.2	NATO HUMINT Centre of Excellence - role and place in the North-Atlantic Alliance	...	109
4.2.1	Concepts, mission, tasks	...	109
4.2.2	Functional and support relationships. Development perspectives	...	113
4.3	NATO HUMINT Centre of Excellence – institutional integration perspectives	...	117
4.3.1	A general perspective of institutional integration in NATO	...	118
4.3.2	Local, national and regional relevance. Considerations on multispectral institutional integration (social, economic, cultural)	...	119
4.3.3	"General Gheorghe Avramescu" Association - an option for the institutionalized social-cultural integration of the NATO HUMINT Centre of Excellence staff	...	121
	CONCLUSIONS	...	123
	BIBLIOGRAPHY	...	128

INTRODUCTION

The new global security architecture is unstable and difficult to predict, acting in the parameters of a competitive field where reference systems, relationship marks and ambition levels determined by values and interests in directions which are many times divergent (if not through their nature, at least through their way of applying) are being redefined. Competitors, on different levels of representation, but with a relevance projected on a global scale, are represented by a multitude of formations with complex organization: states and groups of states (alliances, coalitions etc.), communities, security organizations, groups of political, financial and pan-state economic interests, non-State actors promoting an overwhelming motivation diversity, different civil society organizations etc. (Frunzeti and Zodian, 2009).

The reorganization of the international power system highlights a large spectrum of relational attitudes between the named actors, offering new dimensions to the strategies, policies, relationships and approaches in the field of security, in a real network of dependency and inter-connected interests (regardless of their meaning - divergent or convergent), to which the not less complex dimension of control and internal management are added (generated by the pressure of globalization, economic crisis, social and political crisis, economical competitors, pressure of the international community, terrorist threat, etc.).

Starting from these premises, the first part of the paper presents the stage of knowledge in the field and the methodological approach of the suggested topic, outlining reference items - both from the theoretical spectrum and, mainly, from the practical area, which led to suggesting the present study. All these items place the approach of the NATO Centres of Excellence institution in a multi-disciplinary conjuncture, starting with their relevance in NATO (implicitly, the transformation process of the Alliance), the challenges connected to institutional integration and geo-political considerations.

Highly involved in the dynamics of present geo-political and geo-strategic realities' evolution, NATO, a complex political-military organization, even if it does not pursue on becoming a global security alliance, but, mostly, an alliance with global partners ¹, is involved in a pro-active process of adaptation to the new requirements and challenges of the present and future security environment.

Following, as a main objective, the analysis of connections and interdependence between the evolutions of global security, and particularly (in traditional area of interests of the Alliance) the transformation objectives which are pursued, the paper focuses – in a first stage – on configuring the reference base of approaching the main structural, doctrinal and operational evolutions that are pursued by NATO in its adaptation efforts. Also, this part presents the steps

¹<http://www.nato.int/docu/update/2006/04-april/e0427c.htm>

taken until now in regards with the systematic approach towards the NATO Centre of Excellence, both in the institutional-functional field and from the perspective of operational value.

If the first chapter is dedicated to describing the transformation process of NATO and also to identifying its meanings at the level of the Allied States, chapter three radiographies the Transformation Network managed by the Allied Command Transformation (ACT), focusing on NATO Centres of Excellence.

By describing the structural and functional parameters, identifying the relational framework and work principles which characterize the institutional construction of the Centres of Excellence, we tried to define the large spectrum of multi-dimensional institutional integration perspectives of the NATO HUMINT Centre of Excellence, prefiguring the items of the ratio between openness versus limitation in the plenary manifestation of these abilities.

The review of the functional sheets of NATO Centres of Excellence is able to highlight the large specter of specialties in which they are involved and also the methods for applying own work programs –a defining aspect for emphasizing the particular valences of the mission they commit to.

The number of NATO Centres of Excellence has constantly increased, covering further disciplines and functional areas of interest for NATO capability development. Meanwhile, the involvement of participating nations in COEs augmented, as a proof of the added value COEs bring not only to NATO, but to the involved nations - key stakeholders of these ventures – as well.

The quantitative aspect of the NATO COEs network status is complemented by qualitative dimensions describing the current and projected work of the Centres. Their activity aims at top contribution within the four pillars their programs of work cover – doctrine development and standardization, concept development and experimentation, education and training, or lessons learned management.

In this respect, the paper investigates recent developments on the COEs network's stage, where acquiring Quality Assurance seal and accreditation as Education and Training Facilities for NATO, or even more achieving the Department Head status for the disciplines they support, is a real mark of excellence and an indicator of successful entrepreneurship.

Even more, the unique analytical approach of NATO Centres of Excellence's network parameters, beyond being a simple statistical processing, is able to present a series of interesting conclusions regarding the involvement of the nations and of the Alliance's partners in this institutional framework, relevant both for NATO as an organization, and for the involved states, individually.

This relevance receives a multitude of expression forms which, jointly, define the degree and perspective of institutional integration of the Centres - main reference item of the case study applied to the NATO HUMINT Centre of Excellence from Oradea, which represents the object of the paper's final chapter.

Institutional integration is a vital aspect for any emergent organization, regardless of the field of activity. This aspect becomes more important when we approach aspects connected to structures belonging to the field of security - especially the field of military, even harder to outline because we are addressing a specialty which is mainly characterized by discretion - military information.

Regardless of these, our undertaking is eased by approaching certain strictly technical aspects, which have a lower connection to the specifics of the activity and mostly targets the way in which, both internally and externally, an international military organization works and the way

in which relates to its external partners and also the influence of its existence and specifics in multiple reference plans - economic, social, cultural, touristic etc.

A parallel with similar organizations from other countries can offer interesting perspectives regarding the characteristics of integration and also its effects on the local community (but also on a national representation level).

The final chapter of the paper presents the NATO HUMINT Centre of Excellence from Oradea as an organization being in a full self-defining process and in a process of consolidating inter-institutional relationships, both from the perspective of operational specifics, and from a functional perspective. If, in regards with the internal systemic processes, there are clear work regulations and algorithms (which nevertheless are objects of challenges specific to the area of transformation), the relationship with the external actors is predominately connected to the managerial factors of the organization. This interaction covers subordination and cooperation relationships, nationally and internationally, in the area of military or civil, each with its own specific requests and expectations.

The development path of the multi-dimensional process of institutional integration of NATO HUMINT Centre of Excellence is connected to the community of military information interests (*intelligence*) from NATO (specifically, *information from human sources*), NATO's Network of Transformation (in which the Centre works as an agent of transformation and development in its field of activity), national military environment, academic and scientific research community and, not being less important, the local community.

All presented aspects were the object of debates in different academic circles and described in a series of articles published during (and after) the research program period performed at the University of Oradea - Doctoral School of Geography, in cooperation with "Carol I" National Defense University from Bucharest, and also of scientific communication session or conferences with international attendance held at "Nicolae Bălcescu" Land Forces Academy, at "Lucian Blaga" University from Sibiu, or the Regional Department of Defense Resources Management Studies, Brasov (DRESMARA²), the academic audience - equally military and civil - being very interested in them.

Locally, besides the University of Oradea, I would like to note the collaboration with: "Avram Iancu" Customs Police School from Oradea, the County Council of Bihor and, in certain less formal activities, with the representatives of other institutions involved in national security activities, locally represented.

All these activities and connections decisively contributed to the consolidation of the available theoretical and practical materials, and the chapters of the paper will completely reflect this fact.

This book is the English version, updated and reviewed, of the book with the same name ("*Centrele de Excelență NATO și transformarea Alianței Nord-Atlantice*") published in 2013 at the University of Oradea Publishing House.

² DRESMARA is officially acknowledged by NATO as one of its 29 international Partnership Training and Education Centres – PTEC (http://www.dresmara.ro/index_en.html?id=en103)

1. NATO TRANSFORMATION PROCESS. A BRIEF INTRODUCTION IN THE NATO CENTRES OF EXCELLENCE TOPIC

The transformation process in NATO is an enduring topic in the Alliance, having an exceptional representation both as a framework for those directly involved in this activity, and as a study subject opened to a large number of researchers. As we will show in this chapter, the two dimensions are analyzed and debated in an impressive number of documents, official and academic, the approaches focusing on optimizing the transformation process and improving the anticipated effects from a military perspective, but also from a perspective of security impact on the civil environment.

1.1 NATO Centres of Excellence – an emergent concept in its way to maturity

In connection with this topic, the subject of NATO Centres of Excellence was summarized, in time, to a technical approach, determined by the need for developing by the responsible body from the Allied Command Transformation - the Transformation Network Branch (TNB) - of an algorithm for the needed conditions and activities connected to developing and accrediting the Centres, based on national and international legislation, current NATO regulations and also based on the amount of lessons learned, acquired experience and good practices in this field, determined by each particular project.

The exceptional efforts of the team which enframed the above mentioned structure materialized in a "NATO Centres of Excellence Manual" (Wedge, 2011) – updated as more experience was acquired – which punctually approaches technical issues connected with:

- the general framework for the development of NATO Centres of Excellence and the ways by which nations can apply for developing them (or joining an existing Centre) and the support offered by NATO through ACT, in this respect;
- processes of development, accreditation and periodical re-assessment of the Centres;
- the Steering Committees/ Committees of Directors and the responsibilities of participating nations;
- basic principles of the Centres' activity;
- budget and financial procedures.

Another important bibliographical reference is the "Catalog of NATO Centres of Excellence", annually issued by the same structure and which contains details regarding the mission and work program of all Centres of the network. These details and also other items of interest regarding the general (and particular) activity of the Centres can also be found on the website of the Transformation Network Branch.

All these resources summarize to a strictly technical, lucrative approach, an analysis regarding the implications of institutional integration and its significance through institutional geography, geo-political consequences and relevance through the perspective of security, not being available at the present time.

Thus, the bibliographical ground for multidimensional analysis of the impact of the development of NATO Centres of Excellence, besides the two above mentioned sources, was based on: constitutive documents of the Centres (the Concept of Centre of Excellence, Operational and Functional Agreement Memoranda), the activities performed by these based on the annual programs of work, the reflection of their activity in the local and international mass-media, local observations, comments and studies on this topic, the networks to which they belong etc., having three main research directions:

- transformation in NATO and the consequences of the transformation process;
- relationship between the NATO Transformation Network and NATO Centres of Excellence;
- a case study, applied on NATO HUMINT Centre of Excellence (HCOE).

1.2 Global security and NATO

1.2.1 Global security challenges and the need of transformation in NATO

Specialty literature is full of news and perspectives regarding global security, both through the perspective of certain specialized references, and in the framework of comprehensive approaches.

The debates in this perspective have gradually exceeded the level of focus on violence limited to State monopoly, developing in the meaning. We are interested in security, as a multidimensional circumstance, from several points of view: political, economic, social, cultural, ecological, security. Concerning these, the particular approaches of the vulnerabilities, dangers and threats connected to security became the main aspect of the general interest, searching for a distinct outlining of risk relationships, which, in an integrated vision, could outline the comprehensive table of hybrid threats³.

Beyond this aspect, another perspective connected to the idea of security is given by the reference level, differentiating security states on an individual (*human security*⁴), community, national, and international level.

The interdependence between the two reference systems can be observed on the level of district responsibility degrees, which are assumed by each reference level, under the influence of systematic process phenomena.

A phenomenon like this is globalization, a process with multiple effects in all existential fields, the understanding of these effects being necessary because it changes the analytical bases which we are accustomed to, changing perceptions, behaviors and attitudes in a large variety of options and conditions, which can be translated in benefits and disadvantages. The means of their quantification is different for each one, based on the interests, objectives and organizational

³ See the support documents of the concept available on the website of NATO Transformation Network - <https://transnet.act.nato.int/WISE/ACTIPT/JOUIPT>

⁴ See the basic document: <http://hdr.undp.org/en/reports/global/hdr1994/chapters/> and later developments: UNDP, *Human Development Report 1994*, chap. 2, p. 24, in http://hdr.undp.org/en/media/hdr_1994_en_chap2.pdf and Report of ONU's General Secretary, "In Larger Freedom: Towards Development Security and Freedom for All" (2005), at <http://www.un.org/largerfreedom/contents.htm>

culture of the institutions which approach them. For example, according to UN, creating security is mainly given by observing human rights and economical and social development, these being in a close interdependence relationship. It is obvious that this option is not materialized in a unitary sense by the nations, relatively identical political objectives substantiating and justifying even certain antagonistic actions, the "good" of one entity many times affecting the "good" of another.

On a global level, the asymmetries generating unbalances can be seen in many fields of activity. In economy, the extreme focus on technical and technological development in developed countries, as a main source of economic growth, the high macro-economic vulnerability to external shocks of countries under development, and also the contrast between the high mobility of capital and the mobility of international labor, especially unqualified labor, can become sources of instability (economic and social crisis) and put security at risk. The management of economics is strongly subordinated to the political factor, the reverberations of economical unbalances having a powerful representation in the stability and cohesion of communities.

Concurrently, globalization decreases the states' ability to maintain the monopole on information and power, emphasizes the penetrability of borders and allows non-state actors to uncontrollably accumulate capital. Civil society organizations develop and start to act globally, without the intermediation of the national governments with which they compete as legitimate representatives in promoting the interests of communities, being more interested in actual activities which can support their development and welfare, than in political expression.

National political systems should prove flexibility and should develop their coordinated/integrated action abilities, to become, once again, exponents of the interests of the people (promoting an advanced and modern type of the social status model) and should avoid functional alienation (meaning the servitude and subordination of political energy to purely client oriented purposes).

The definition of globalization should not exclude the military dimension, which, during previous years, has materialized especially in fighting against terrorism and insurgency connected to this. In the context of globalization, this inter-connection and "affiliation" is a necessary and sufficient argument for stating that the security of a certain area cannot be separated from global security. Even though traditional types of fight against dangers and threats against international security - military alliances - are still needed for eliminating insecurity factors and sources which globalize, the simple military power projection of the states is not sufficient anymore. Conflict, of any nature⁵, receives new characteristics, undergoing developments for which states and international institutions are not completely ready, but to which they react by means of an ad-hoc adaptive process.

We can conclude that, through the dimensions of its manifestation, globalization holds the seeds of certain pressures which influence the international security environment and also the way in which the perception of security is reflected on the spiritual and physical security experiences of each individual⁶. Thus, the dichotomous processes specific to globalization: fragmentation vs. integration⁷, localization and decentralization vs. centralization, become

⁵ The fact that most violent activities depart from ethnic, religious, territory and/or ideological motivations, is an additional argument for taking into consideration all these aspects in assessing safety statuses.

⁶ ***, Department of Social and Cultural Anthropology, *Constructing Human Security in a Globalizing World (CONSEC)*, August 2007, at <http://www.fsw.vu.nl/en/research/research-programmes/social-and-cultural-anthropology/index.asp>

⁷ Globalization means both integration, through cosmopolitan standardization, and fragmentation, through the stimulation of identity preservation reflexes and dissipation of central power.

incumbent and balanced coordinates, both on the decisional level and in regards with adapting the actual method of managing new realities. Altogether, globalization leads to a new international structure, divided between those countries which are integrated in the global economy and those which are either left behind, or are against new global order. This new international system represents, in case of optimists, the hope for global expansion of democracy, market economy and international multilateral cooperation, whilst skeptics see it as an end created by economic crises and new polarizing social-cultural and geo-political forces.

In this context, the beginning of the 21st century is dedicated to the efforts for developing cooperation methods and security policies, which are able to reply to global insecurity (Bari, 2003), at the same time realizing that globalization does not exclude traditional geo-political preoccupations (Kugler and Frost, 2002). Divergent positions, and also the need to achieve new areas of agreement, are strongly visible in the fora and summits which host key-leaders of the world; they are challenged to outrun the strict area of national interests and to adopt a global political language, which should frame own priorities.

Not less important is the fact that an adequate ability to control and manage security requires foresight and anticipation. Any action policy has to rely on logical, coherent, plausible predictions. And, the field of security analysis overtakes more and more the area of exclusiveness. Not only national structures with attributions in the field of security and international security organizations are involved in this process. As security enlarges its area of reference, more and more organizations (think-tanks, academia, civil society organizations etc.) come to contribute with own expertise to the shaping of a complex image of the security environment.

An analytical intercession like this is the Multiple Futures Project - MFP⁸, developed in NATO as a reference item in regards with the possible developments of the international security environment in the following two decades, with direct influence on the objectives and undertakings of the Alliance. This project – alongside other models and prospects for the future security environment – represents a basis for reforming NATO's Strategic Concept and allows the development of certain modal plans, designated to reduce the levels of area risks to which the Alliance can be exposed from the perspective of security.

The recent security developments have shown a complex picture in the NATO area of interest; not only the Russian aggression in Ukraine, the deepening civil war in Syria, the emergence of ISIS/ Daesh, or coordinated terrorist attacks in the heart of Europe, but economic problems in the Eurozone, unstable energy prices, increasing environmental concerns, centrifugal pressures within the EU (e.g. BREXIT), or migrants crisis in Europe are events/ phenomena that reinforce the need for continuous future horizon scanning in order to support improved decision making.

As a result of more concrete threats against the Allied Nations, the Wales Summit (September 2014)⁹ marked the NATO turning point toward territorial defense under article 5 of the Washington Treaty, when Allied leaders approved the NATO Readiness Action Plan (RAP), based on two main pillars: Assurance Measures (assets deployment, air surveillance, maritime patrols, exercises) and the Adaptation Measures (an enhanced NRF, pre-deployed Multinational NATO Command and Control Centres/ NATO Force Integration Units (NFIUs) in the Eastern flank).

⁸ *** , *Multiple Futures Project*, at <http://www.act.nato.int/multiplefutures>

⁹http://www.nato.int/cps/en/natohq/official_texts_112964.htm

In his Annual Report 2015, the NATO Secretary General – Jens Stoltenberg – reviewed NATO’s three core tasks – collective defence, crisis management and cooperative security – under the light of recent security developments, marked by the aforementioned emerging challenges.

Observing a dramatic slowing of cuts to defence spending among most of the Allies (as agreed at the Wales Summit) after years of a severely decreasing trend (figure 1), Mr. Stoltenberg praised what he called “*the greatest strengthening of NATO’s collective defence since the Cold War*” throughout increased presence in the Eastern part of the Alliance¹⁰, raise of NATO Response Force capacities and operationalization of the Very High Readiness Force, intensified exercising and training, improved capabilities to combat hybrid warfare, enhanced intelligence and early warning, improved cyber defence and significant progress with NATO’s ballistic missile defence system.

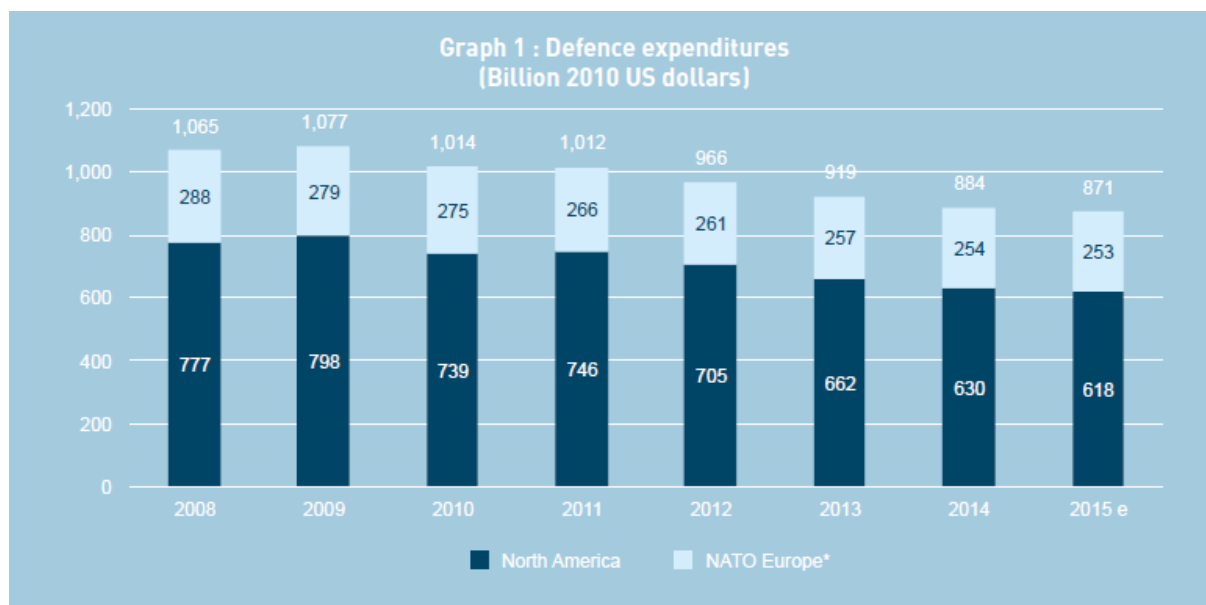


Figure 1 NATO Member Nations` Defense expenditures 2008-2015
(The Secretary General’s Annual Report 2015, p. 108)

Oriented towards future challenges, the Strategic Foresight Analysis (SFA) 2015¹¹, whose issue followed closely the release of the first Framework for Future Alliance Operations¹² (FFAO, 2015) as a contribution to the ACT Long Term Military Transformation (LTMT) programme and the NATO Defence Planning Process (NDPP), supports a common understanding of NATO strategic posture within the evolving geo-political landscape. The assessment of the characteristics of the future relies on several themes that shape the complexity of nowadays` security understanding: *politics* (growth of hard power and return of power politics, the increased role played by non-state actors, functionality of governments), *human theme* (focused on: changing demographics, urbanization, human networks, and fractured identities),

¹⁰ It is expected at the next NATO Summit in Warsaw, in July 2016, to decide on the balance between a forward presence and NATO ability to reinforce

¹¹NATO, HQ SACT (2016) *Strategic Foresight Analysis 2015 Update Report*

¹² FFAO is a comprehensive analysis that draws upon the lessons of the past, fully informed by the present, and provides a long-term trajectory that is meant to inform NATO’s strategic lines of effort with a better understanding of future operational challenges

science and technology (debating topics like: development correlated with influence, increased access to information, energy solutions), *economics and resources* (where resource scarcity and energy security remain serious concerns), and the *environment theme* (in the condition of natural disasters expected to intensify in frequency and severity as the impacts of climate change increasingly materialize, and making appeal on resilience of infrastructure and resources, such as food, water and energy).

This complex scenario, where unpredictable evolutions may lead to a large array of threats against Nations, entails equal response from NATO; adaptation to this environment requires a diversified spectrum of capabilities, to which NATO Centres of Excellence (COEs) bring invaluable contribution.

The following chapters will seek to capture recent evolution within NATO COEs network and to outline the importance of a series of achievements that position COEs at the spearhead of NATO capabilities transformation efforts.

1.2.2 Prospection of the future security environment. The Multiple Futures Project

The international community has to find ways for facing new systemic risks, being crucial, on a decisional level, to have correct, detailed and opportune information in regards with the level of security, possible threats and risks. In this meaning, the common debates of the political factor and field specialists, together with the actors of the civil society, represent an important means for identifying insecurity sources and also for finding solutions, all these creating security policy references on a national, alliance or security organizations level.

As we have shown previously, the general perception is that present risks are mainly created by: terrorist attacks, development and proliferation of mass destruction weapons, doubled by the danger of them being held by non-democratic political systems or by certain individuals belonging to organized crime or terrorist groups, the existence of non-democratic systems or with a fragile institutional structure, massive flows of refugees, ecological unbalances or major natural catastrophes (drought, flooding, fire, earthquakes, nuclear accidents etc.), economic insecurity, regional or local ethnic conflicts, perpetuation of conflicting states in certain areas or non-governable areas, which are outside of the control of central authorities, by criminal groups which promote different interests.

Fighting against these types of risks, weakly defined, diffused and with a potential of mass destruction, involves the need for more and more complex military and non-military strategies and policies (which have to outrun conflicts of interests and different perceptions in regards with the strategies and procedures which should be followed). A common reference system is absolutely necessary in order to assure vision coherence and finding a common prevention / reaction method in front of specific challenges.

In NATO, this process depends on the internal policy priorities of the European and North-American allies, to which the differences in risks' perception, means and procedures for counteracting them are added, items which directly influence the projection of a visionary approach of the transformation missions and process of the Alliance. In order to assure the necessary openness and transparency, and also to guarantee a large analytical basis, at the development of the project created for configuring future evolutions of global security, a number of 45 nations, over 60 institutions, and a total of more than 500 political, military, civil and economical experts have contributed, belonging both to the public and private sector, from certain governmental and non-governmental international organizations. They have gathered in

21 workshops and strategic commitments, including combined sessions of the North-Atlantic Council (NAC) and the Military Committee (MC) of NATO.

The Multiple Future Project came to offer the needed unity of vision, creating an intellectual framework which shapes future plausible environments which the Alliance will face, with an action horizon until 2030, for the purpose of identifying relevant threats and their military and security implications, based on a repeated analysis process and on the contribution of national experts. By using this means of work, another objective of the project was also followed, namely supporting strategic dialog as a development vector of a common perception and deepening of these types of realities in the Alliance.

The study shows that the types of challenges existing for NATO and its partners are:

- *Challenges derived from the power of certain entities* (including traditional defense problems, like the ones connected to inter-State conflict);
- *Challenges derived from the fragility of other entities* (including instability caused by failed States);
- *Challenges derived from nature* (natural disasters, problems from energy resources to assuring food and water);
- *Challenges of military organization in societies undergoing change;*
- *Challenges to the nature of military operations.*

Based on these challenges, MFP has developed four specific preliminary models of the future. These are possible scenarios used as common framework for the discussions concerning possible threats, their implications and attenuations, which NATO was facing during the reference period. The suggestive names of the four preliminary models of the future, highlighting their description in MFP, are: "*The dark side of exclusivity*"¹³, "*Deceptive stability*"¹⁴, "*Contradictions of Modernity*"¹⁵ and "*The policies of the new powers*"¹⁶.

MFP also lists 25 possible risk conditions, varying from "challenges to State authorities" to "vulnerabilities of key points and infrastructures in non-governed areas". Risk conditions represent specific situations which can represent threats to individuals, integrity of territory and human and national values. Starting from this list of risk premises, MFP shows other conditions which constitute primary influential factors of each of the four preliminary modules of the future.

The security implications of these are associated with a series of consequences regarding the adapting of the Alliance, regarding the consensus in connection with threat categories which request a reply based on Article 5 of the Treaty, with the need to examine the responsibility to intervene outside the traditional engagement areas of NATO, with the awareness of the means by which technological development and accessibility can be exploited by the enemies of the organization and with the opportunity to capitalize values, ideas and events of the globalized world by means of an enhanced interaction and communication with the international partners.¹⁷

¹³**Integration (economical/ globalization), climate changes, assignment of resources, variable capacities of the States** – weak and failed States generate instability in the areas of interests, and the states of globalized world are facing strategic options which derive from this reality

¹⁴**Demography, assignment of resources, frictions (as a result of power distribution)** – developed countries preoccupied with changes in society and demographic problems in the detriment of geo-political risks

¹⁵**Usage of technology, demographics, competing global ideologies and visions** – advanced, rational societies, based on networks, with inherent fragilities, are facing the challenges of certain dictatorial external systems

¹⁶**Competing global frictions, ideologies and visions, assignment of resources, integration** – an increasing number of major powers, competition and proliferation undermine the value of international organizations

¹⁷ ***, *Multiple Futures Project – navigating towards 2030* (Final Report - 2009), p. 5-6, April 2009

The recommendations given by the document from the perspective of military implications, both in the **field of concept and doctrine**, and **enhancement of abilities**, are connected to¹⁸:

- adapting to the requirements of hybrid threats;
- cooperation with non-NATO nations and other international actors;
- prevention and resolution of conflicts, management of consequences;
- counter-proliferation of mass destruction weapons;
- development of expeditionary abilities and of fight in austere environments;
- strategic communication and "conquering the fight of words", for the support of the basic mission, of objectives and operations of NATO;
- problems connected to organizational and force development, so that it can offer strategic unity, can maintain the solidarity of the members and can offer a common understanding of collective defense.

The re-evaluation of the Alliance and the according developments in these directions, completed with valences designated to allow the correct management of uncertainties, are able to maintain the flexibility and abilities needed for having a credible, stable organization, able to manage a large area of risks, in a manner integrated for the general purpose.

As General Mattis (ex-Commander of the Allied Commandment for Transformation) observed in the preamble of the document, the correct usage of MFP is able to allow the re-evaluation of defensive plans, to update scenarios connected to them, to influence the development of NATO concepts and strategies, to enhance the training and instruction curriculum.

Thus, MSP becomes a reference document for NATO structures, with attributions in the field of conceptual development and also in the fields involved in the general educational and training process - NATO Centres of Excellence belonging to these.

But, the Alliance has to develop not only its doctrine, types of training and educations, but also the abilities needed for confronting new types of threats, manifested on the strategic, operational and tactical levels.

In spite of a possible impression of unrestricted potency, NATO has relatively limited resources - not only financial, but also human - able to manage all these adaptation needs. The contribution of the members, which participate, under different types of representation and partnership, in a real support network for the transformation process, can only be beneficial.

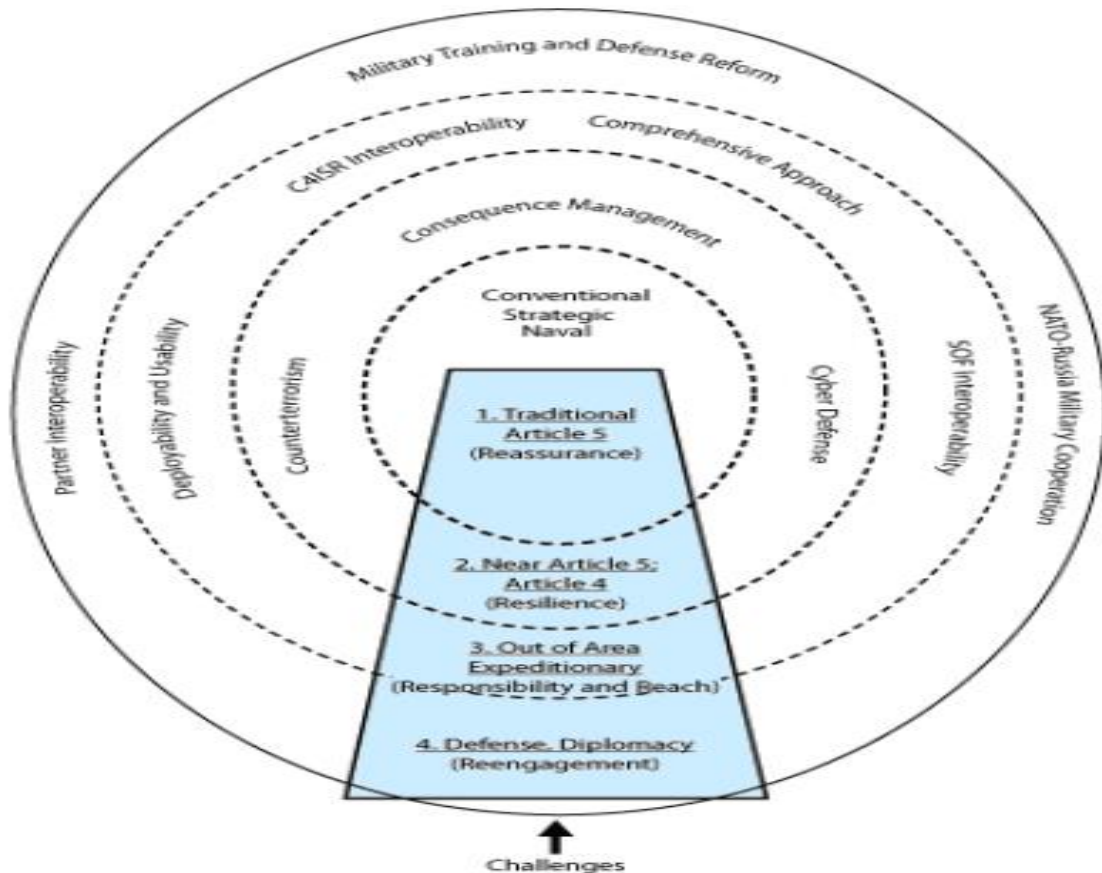
According to Hans Binnendijk, MFP foreshadows the framework and premises of four fundamental directions of the Alliance's transformation, synthesized in (Binnendijk and Hoon, 2010, 1):

- re-ensuring the determination to act against an armed attack, in accordance with the stipulations of Art. 5;
- flexibility in regards with attacks which are outside of the stipulations of Art. 5 - untraditional challenges or humanitarian disasters which require the contribution of military forces;
- shared responsibility of all members regarding the contribution to crisis management, given that the North-Atlantic Council agrees with a mission like this;
- re-assertion of the commitments with the partners and other nations outside of the territory of the Alliance for the purpose of assuring the premises of defensive

¹⁸ ***, *Multiple Futures Project – navigating towards 2030* (Findings and recommendations), p. 8-17, April 2009

diplomacy, military cooperation, construction and enforcement of partnership abilities.

A correspondence of the initiatives associated to the four evolution benchmarks are represented in Figure 2.



Legend

C4ISR = Command, Control, Communication, Computers, Information, Surveillance, Recognitions
SOF = Special Operations Forces

Figure 2 The four NATO transformation benchmarks and a series of associated initiatives (Binnendijk and Hoon, 2010, 4)

Even though MFP promotes the need of a high level interaction with non-NATO nations and other international actors, as a condition for expanding the role of the Alliance in enhancing the security and stability status outside the traditional areas of employment, this topic is a little sensitive. If we can consider that there is a legitimate interest in pursuing certain security coordinates on a global level, these can be best translated in partnerships with regional security organization, in which NATO - through its specialized structures - can provide the know-how, training, mentoring and support¹⁹. The global security interest of NATO can be better defined by

¹⁹ Nevertheless, the limits of this determination have to be correctly understood by the beneficiaries, in order to be able to avoid scenarios like the war in Georgia, where the government set itself to solve the separatist crisis from Osetia and Abkhazia counting on the increase of the relationships with NATO and on the partnership with USA, which should have determined Russia from holding back from a harsh military reaction.

supporting the development of regional security abilities and assuring certain partnership conditions which can guarantee the alignment to a common reporting model to the security needs and understanding of risks, challenges and vulnerabilities in this sense.

Nevertheless, NATO's positive interaction with this type of regional powers, but also with other international actors, will offer the Alliance the opportunity to influence ideas, values and events of the globalized world, with a minimum usage of resources.

1.3 NATO transformation from the Strategic Concept perspective

A decisive source of transformation is represented by the political and military consensus and debate on the level of allied states, the essence of which is transposed, hierarchically, from documents which express the visions and coordinates of the action, to documents which regulate the effective application of the means of transformation in the reality of intention.

Thus, strategic concepts are first degree documents, designated to promote political and military principles on which the discourse and actions of the Alliance are based on. If during the Cold War, the strategic concepts were classified military documents, which could not be accessed by the public, these have become real public diplomacy tools (being completed, accordingly, with military documents which regulate the aspects which keep their confidentiality characteristics).

NATO's new Strategic Concept constitutes an opportunity with a major importance in the efforts of transformation and reformation of institutions and the organization's abilities. Nevertheless, besides these, a number of specialists consider a parallel process of transformation as being absolutely necessary, focused on a specific set of initiatives and reforms, which should be correlated, but not conditioned, with the Strategic Concept from the perspective of planning, a process which comes to enforce the vision promoted by the concept, by means of measures adapted to the fast changes of the security environment.

1.3.1 Evolution of the new Strategic Concept of NATO – initial viewpoints of the Group of Experts

The need for a new concept was created by the development of the global security environment, the events of 11th of September (continued by the terrorist attacks from Madrid and London) being decisive in creating a new approach to global conflicts. The emerging challenges of security²⁰ were completed by challenges determined by the increase of number of the members of the Alliance, a real decisional and functional test. NATO's activities have to meet the agreement of 28 nations, certain specific interests being even divergent. As an addition, the Alliance's activities have to have the political support of the national decisional factors which, on the other hand, are held responsible in front of the communities which they represent. These actions should be taken by being aware of the security advantages given by the Alliance and also of the direct impact on the life of each individual.

Recent tendencies, like economic crises, reactivated old disputes, deepening of disagreements connected to military participation, create premises for a weakening of the political support from inside the Alliance. In this meaning, the new Strategic Concept has the role to reiterate the commitments of each member for the purpose of a common settling of future

²⁰ These include, but are not limited to: *terrorism, proliferation of nuclear or advanced technologies, cyber-attacks against modern communication systems, sabotage of energy providing pipes and blockage of important sea transportation routes etc.* (Denmark, 2010, 64)

conflicts which affect the interests of the Alliance. Also, the document has to recognize the urgent need of change, remaining connected to the initial values which brought its positive international reputation.

The basis for developing the new NATO strategic concept can be found in the April 2009 Strasbourg/Kehl Summit, when the leaders of the Alliance designated the General Secretary, Anders Fogh Rasmussen, to assign a group of experts which should develop the basis of the document (Dinca and collaborators, 2001).

This group, presided by Madeleine Albright (USA) and co-presided by Jeroen van der Veer (Netherlands), started its activity in September 2009, co-interested the civil and military environment and creating the premises needed for the internal and external debates regarding the identified topics of interest. Thus, the process for developing the suggestions for the new strategic concept had a large public opening by means of the interferences offered by the Internet (thematic forums), also receiving an important contribution from the academic and scientific research environment²¹.

As a result of conjugating the efforts of the groups of experts with the positions of the NATO and partner nations, and also the opinions expressed by the participants at the debates, the directions for creating a policy of the Alliance oriented towards 2020 were circumscribed to a set of benchmarks, as follows:

Reaffirming of NATO's central commitment: collective defense. Even though Article 5 remains the central element, this also has to be supported, aside from available military capabilities, by planning for emergency situations, specific theme exercises, maintaining fight abilities and by an important logistics, all targeted to maintain the trust of the allies in their own reaction ability.

Protection against non-conventional threats. Even though the probability of a direct attack against the Alliance is low, there are certain types of threats which are less conventional, which, even though they can emerge at large distances, have a major impact on the Alliance. This typology includes: *mass destruction weapons, terrorist attacks, cyber-attacks, and also illegal interruption of basic supply lines* (Denmark, 2010, 52). These identified risks, even though they are not endorsed by Article 5, can be approached in a trans-border way, beyond the borders of the Alliance.

Developing directives for operations outside the borders of the Alliance. NATO, as a regional organization, is not the only security structure able and responsible for preventing and managing global conflicts; the authority and resources of the Alliance are limited, due to which management of crisis situations is requested from other institutions or nations. The new Strategic Concept sets clear activity directions of the Alliance outside its borders²².

Creating conditions for the success of the Afghanistan mission. The Afghanistan mission is the largest military operation ever performed by the Alliance, due to which it was seen as a heavy test for the future of the Alliance. Because of its extent and the

²¹ An impressive number of specialty journals and think-tanks have contributed with assessments and observations to the confrontation of ideas on the topic of developing a new strategic concept, but also with critical approaches for the document approved at the NATO Summit from Lisbon. We name a few of them: Heritage Foundation (McNamara, 2010), Royal United Services Institute (RUSI) (Eyal, 2010), ISN Security Watch (Noetzel și Oroz, 2010), Federation of American Scientists (FAS) (Kristensen, 2010), STRATFOR Global Intelligence (Papic, 2010) and many others

²² ***, *NATO 2020: Assured Security; Dynamic Engagement*, (Analysis and recommendation of the group of experts on a new Strategic Concept for NATO), 17th of May 2010, at <http://www.nato.int/strategic-concept/expertsreport.pdf>

economic support offered by the Nations for stabilizing and rebuilding Afghanistan, the premises of a major political synergy are created, and, implicitly, of its success. Recent operations in Afghanistan also offer a basis of learned lessons which are presented in the Strategic Concept, like: request for cohesion in the Alliance, need for a unified command, value of opportune planning and public diplomacy, need for an integrated approach and the need for dislocation of forces in strategic areas for a longer period of time.

There are also a series of important problems which obstruct the quick completion of the mission, like: lack of a common decision, national limitations, different approach in regards with commitment rules (Nicaise, 2010), deficiency of information exchange etc.

Consultations for crisis prevention and management. Because of the diversity of security risks in case of the members of the Alliance, it should more often rely upon the stipulations of Art. 4, which implies political consultations in order to prevent and manage crisis situations in a timely manner, without waiting for their escalation to a threat stipulated by Art. 5. Consultations based on Art. 4 can create useful information exchange, different points of views for the purpose of creating the premises for a correct resolution of the situation, be it diplomatic, preventive, rectifying or coercive. In this context, one of the suggestions which can have an important role in the timely warning policy, is to create certain information fusion structures.

A new age of partnership. The new Strategic Concept defines the need for partnership, due to the complexity of the international environment and the time perspective until 2020. NATO has to clarify and deepen its relationships with its key partners, to promote new relationships based on a common interest. Special partnerships with UN and EU are defined as being "essential" and have to be developed. The concept of "Comprehensive Approach" is expected to clarify the implementation methods of partnership policies. The relationship with Russia remains a special one, the geo-strategic context created by the increase of the influence of certain important actors like China, Brazil and India is making this cooperation option more and more possible.

Taking part at complex problems by means of an integrated approach. Healthy partnerships can create the premises of an open settlement of complex problems which affect security, preferably an approach which embeds both components: civil and military. Not being an organization able to have solutions for any problem, NATO can integrate a series of temporary support elements, including national governments and non-government entities, which can act for the purpose of economical rebuilding, political reconciliation, administration enhancement and strengthening of the civil society. One of the possible concerns will probably be represented by the means of co-interest of these institutions, the legality from both perspectives of the international legislation and also the stipulations of the Alliance regarding access to information.

Commitment of Russia. NATO-Russia partnership was considered an important enhancement item of the Euro-Atlantic security. However, the formal communication channel - Council of NATO - Russia has proved it limits, mainly due to certain suspicions regarding the real intentions of both parties. The new Strategic Concept targeted to reaffirm the Alliance's commitment for using this communication channel with good intentions, in fields of common interests, like: nuclear non-proliferation, control of weaponry, fighting against terrorism, anti-missile defense, efficient management of crises, peace support operations, sea security and fighting against illegal drug traffic.

To date, cooperation has been suspended in response to Russia's military intervention in Ukraine, but political channels of communication remain open²³.

Keeping the doors opened. The expansion of the Alliance from 16 to 28 members created a European development engine and has decisively contributed to the increase of the Alliance's members' security. The stipulations of Art. 10 of the North-Atlantic Treaty regarding the access of new members are kept active, together with observing the adherence requirements.

Mainly, the document paraphrases the intent to continue the strict expansion in the European area, which consolidates NATO's regional role.

New abilities for a new era (military transformation and reform). Political and military commitments do not represent anything if they are not supported by the needed abilities. The New Strategic Concept has to have a set of new or enhanced abilities. These have to come as an answer to a series of new requirements of the future security environment, like dislocation of forces at high distances, increased security needs and plans for unpredicted emergencies. The armed forces of the members of the Alliance have to transform from a massive and static state, typical for the Cold War, to a more flexible, volatile and versatile state, all performed through a more intelligent use of the given resources, together with reformation measures (Binnendijk and Hoon, 2010) NATO's commandment considers this aspect as a priority in its endeavors connected to the SMG leaders of NATO member states since April 2010, together with other initiatives connected to the process of transformation, especially the one connected to abilities available to the Alliance.²⁴

Policy of nuclear weapons: solidarity for freedom. NATO has to maintain a minimum level of nuclear deterrence as long as these means exist. Any change in this policy, including the geographic distribution of the placement of availabilities in Europe has to be performed with the expressed agreement of the Alliance, in complete form. The Strategic Concept reaffirms NATO's support for the prevention of nuclear proliferation and for the measures which have to be taken for handling the nuclear materials in security. At the same time, the Alliance expresses its desire of progress for a world free of the fear of nuclear threats, aspect proven by a series of measures adopted for significantly reducing the types and number of nuclear forces in Europe. Also, NATO encourages transparent consultations with Russia for the purpose of reducing nuclear arsenals.

The explicit indication of the European nuclear capability offered by France and Germany is interesting, even though the capabilities of USA still remain the main means of discouragement. This can create the premises for a new architecture for placing nuclear vectors in Europe, knowing the older ambitions of Germany for creating a Europe without nuclear weaponry.²⁵

The new mission of the anti-missile shield. Undertaken as an essential military mission of the Alliance, the anti-missile shield project, this time having a complete coverage of the Alliance's area of interest, is based on the fears created by a possible attack of Iran against NATO states from its area of action. Participation is available to all members, including partners, especially to Russia. Its implementation is estimated to be

²³http://www.nato.int/cps/en/natolive/topics_50090.htm

²⁴SACT letter to CHODs, 12 April 2010, p. 4, at

https://transnet.act.nato.int/WISE/CollaboCat/Transforma/.../index_html

²⁵***, *Strategic Comments* – Volume 15, Issue 10 – December 2009 A new strategic concept for NATO

performed by placing SM-3 intercepting missiles in two phases, until 2015 in Romania and 2018 in Poland, together with placing a radar, Turkey being the first option (even though the neighboring relationship with Iran creates serious hold-backs) (Patel).

Reply to the high level danger of cyber-attacks. NATO has to accelerate its efforts in this field, by protecting its own communication and command systems, helping the Allies to prevent and quickly recover after attacks, together with developing adequate "cyber" defense abilities.²⁶ The implementation measures in the Alliance contain the development of an educational Centre in this field, by using the platform of NATO's Centre of Excellence in the field of Cybernetic Defense from Estonia²⁷, an early warning system and mobile intervention teams in case of these types of attacks (Binnendijk and Hoon, 2010).

Implementation for creating a more agile Alliance. The Strategic Concept authorizes and encourages the General Secretary to initiate a deep reforms agenda in the Alliance, aimed at offering versatility, increased ability to take quick decisions, increased efficiency at a lower price.

NATO's communication policy The success of this endeavor highly relies on the way in which its stipulations will be presented to the population from inside and outside the Alliance, highlighting the Alliance's role in assuring a security climate.

Vision and purpose. In comparison with the first decades, NATO seems to lose its central role in the geo-strategic equation, instead being present in a variety of situations, either as a leader, or as support for the partners. The solution would be a strict monitoring of the security proximity, together with identifying reply measures to situations appearing at high distances, which subsequently can affect the security of the Alliance. This can only be created through a common approach, a member's seat at NATO's table being more of an obligation. The Alliance has to adapt to the requirements of political and military changes, but, by all means, has to remain faithful to the ideals on which its establishment was based on.

We conclude that, through the approached topic and promoted ideas, the report presented by the group of experts on the 17th of May 2010 aimed at offering the balance between the need for an "assured security" and "dynamic commitments" of the Alliance, covering relevant security issues and suggesting possible solutions for handling them; criticism connected to the document is mainly based on the absence of quantifiable objectives.

1.3.2 NATO Transformation and the new Strategic Concept

The work principle concluded in 1967 by the Belgian Ministry of External Affairs, Pierre Hammel, by which the Alliance has to maintain unity together with identifying long term international political security requirements, through a continuous adaptation process, is still valid even nowadays. The old Concept from 1999 stated a series of ideas which are still valid and are also taken over by the New Strategic Concept. These are²⁸:

- NATO's central role is to protect, through political and military means, the freedom and security of all members;

²⁶ SACT letter to CHODs 12 April 2010

²⁷ <http://www.ccdcoe.org/>

²⁸ http://www.nato.int/cps/en/natolive/official_texts_27433.htm

- the Alliance maintains the trans-Atlantic connection as a means for correlating the security of North America with Europe;
- the security of the Allies is indivisible: an attack against one member is automatically considered as an attack against the Alliance;
- the military forces of the Alliance have to discourage any potential aggression against it and to keep the political independence and territorial integrity of its members;
- the Alliance's success depends on the equitable repartition of roles, risks, responsibilities and benefits between its members;
- NATO will use its connections for preventing and discouraging crises;
- stability, transparency, predictability, low level of weaponry and weaponry assessment based on control agreements and non-proliferation are able to support NATO's political and military efforts for assuring its strategic objectives;
- for fulfilling its attributions, NATO will continue to observe the legitimate security interests of others and to aim at amicable conflict resolutions, in accordance with UN Charter.

The new security context has created the development of the Alliance's action vision. In accordance with the conclusion of the expert group's report, a set of seven major risk factors has been identified, the international community being interested in it from the perspective of global security:

- proliferation of nuclear weapons and mass destruction weapons;
- ambitions of international terrorist groups;
- persistence of corrosive regional, national, ethnicity and religious disputes;
- global addiction to informational systems with a vulnerability potential;
- competition for oil and other strategic resources (a result being the importance of sea security);
- demographic changes which can aggravate global problems, like poverty, hunger, illegal immigration, pandemic plagues;
- accumulation of the consequences of environmental destruction, including climate changes.

Inclusively integrating the entire specter of security perspectives which drive NATO's adaptation requirements, we can highlight three major ideas regarding possible future security scenarios which the Alliance will face. Thus, a direct military aggression against NATO is not likely probable, but it cannot be ignored. At the same time, the most probable threats in the following decade are non-conventional, having the shape of: attack with ballistic missiles (nuclear or conventional); attacks of international terrorist groups; cybernetic attacks, having different types or intensities. The danger of non-conventional threats has major implications on NATO in the field of fight training (even the definition of attack in accordance with Art.5 being a challenge), defense strategy, need for military transformation, ability to make quick decisions and the availability to offer support to countries and organizations outside the Alliance.

Thus, the main stipulations of the new Strategic Concept of NATO cover a series of reference fields considered as being relevant, expressing the vision and defining the attitude of the Alliance in regards with:²⁹

²⁹ ***, *Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization*, Adopted by Heads of State and Government in Lisbon, Nov. 2010, at <http://www.nato.int/lisbon2010/strategic-concept-2010-eng.pdf>

1. **Collective defense.** The concept confirms the founding commitment of the member states to *"mutually protect each other against an attack, including against new types of threats"*. Thus, the preservation of an area characterized by a high level of human security, a community of values based on the principles of individual security, democracy, human rights and legal regulations are maintained
2. **Nuclear field.** NATO commits to *"create conditions for a world without nuclear weapons"*, but it will still be a nuclear alliance *"as long as there are nuclear weapons in the world"*. Dissuasion remains a *"crucial element"* of NATO's strategy: nuclear forces offer the *"supreme guarantee"* of the Alliance's security.
3. **Anti-missile defense.** NATO defines its ability to protect itself against a missile attack as being one of the *"main elements"* of its defense. In this field, the Alliance will actively look for *"Russia's and other Euro-Atlantic states' cooperation"*.
4. **Partnership policies.** Partnerships with other countries are seen as a contribution to *"the consolidation of international security, defending NATO's defense, its operations and preparing countries which are interested in joining NATO"*. *"An active and efficient European Union contributes to the global security of the Euro-Atlantic area. EU is a unique and essential partner for NATO"*. NATO-Russia cooperation has a *"strategic importance"*. Beyond the pragmatic and functional approach of the idea of partnership and cooperation, we have to observe the idea of the expansion of a certain security model, of conditions and favoring valences of a superior human condition.
In the same context, the partnership with UN and NATO's support for its resolutions represent a special importance for the field of human security. The recommendations of the Group of Experts regarding the relationship between the Alliance and UN have focused on, besides the enhancement of inter-institutional connection and offering support for helping UN in performing its missions, the need for coordination between the two organizations in case of genocide, massive breaches of human rights or humanitarian emergencies. In this meaning, the Group of Experts has indicated as being opportune to include in the Strategic Concept NATO's availability to reply in a positive manner to the requests of UN for acting in such situations (or for supporting other regional organizations)³⁰.
5. **Crisis management.** Crises and conflicts outside NATO's area are seen by the organization as a direct threat against its territory and population, committing, in the limits of its possibilities and needs, to intervene by means of crisis prevention and management, to take part at settling the post-conflict situation and to support the reconstruction of the affected areas.
The lessons learned from different operations have demonstrated the need for a comprehensive political (civil and military) approach, able to offer an efficient management of crisis situations. Stability, once the conflict is over, cannot be obtained without a continuous effort for normalizing and developing the affected area, effort which is joined by NATO. For this purpose, the Alliance will create *"an adequate civil crisis management structure, in order to interact more efficiently with its civil partners"*.

³⁰ ***, NATO Public Diplomacy Division, *NATO 2020: assured security; dynamic engagement. Analysis and recommendations of the Group of Experts on a new Strategic Concept for NATO*, 1110 Brussels – Belgium, 17 May 2010, p. 25, at www.nato.int/ebookshop

- 6. Terrorism and illegal traffic.** Terrorism is considered a *"direct threat"* to the states of the Alliance. As an addition, conflicts outside of NATO's border can threaten its security, *"feeding extremism, terrorism"*, but also drug, weapon and human trafficking.
- 7. Cyber-attacks.** The concept stipulates the development of the Alliance's ability to *"prevent and detect cybernetic attacks"*. The text quotes, as possible sources of threat, *"foreign services and armed forces, organized crime, terrorist and/or extremist groups"*.
- 8. Energy security.** NATO wants to contribute to this field, *"including by protecting energy infrastructures, critical transit areas and routes"*.
- 9. Configuring the framework of an Alliance for the 21st century.** NATO leaders state that they are *"determined to continue the renovation of the Alliance in order for it to be ready to face the challenges of the 21st century"* and *"are firmly determined to maintain its efficiency as a political-military alliance which had the greatest success in the world"*.

Most probably, the trends of globalization will intensify worldwide imbalance. Its effects will determine a more intensified economical, service, people, idea, habits, criminality and weapon related trans-border traffic. At the same time, the trend will be represented by the strengthening of certain actors against others and also by the strengthening of certain tensions between personal identity and group identity. In this context, events can extend very quickly, due to communication means and mass-media, having immediate effects on global security. A terrorist or cybernetic attack can have an immediate effect, be it by an excessive media broadcasting of a message, be it by creating a model in order to be reproduced for anarchist purposes.

In this geo-strategic context which has a tendency for decentralization, NATO has to be ready for a complex series of direct threats towards the Allies, these being able to affect citizens, economy, order, infrastructure, security forces or national values. These attacks can be either direct or through certain declarations, both having the purpose of a political threat. Hybrid combinations can be imagined, an example being the purchase of mass destruction weapons by a terrorist group from a state actor, moment in which the Alliance can be called for an intervention, even if its own immediate security is not affected, still existing the danger of a latent propagation of the danger, with subsequent tangency on the Alliance.

Even though it is less probable, there is also the risk of technological transformation of the battle site, reason for which the Alliance and its partners have to permanently follow potential informational, communication, cognitive, biological, robotic and Nano-technological obstructions.

NATO and EU remain the main stability and cooperation columns in the Euro-Atlantic area. Even though this area is characterized by stability, the frozen conflicts from Caucasus and the Balkans need a close monitoring, in order to prevent the exportation of certain aspects connected to weapons, drugs and human traffic.

Due to its size and status, Russia will probably play an important role in drawing the medium Euro-Atlantic security future. The final positive decisions connected to the permission for supplying NATO troops from Afghanistan, signing the START treaty regarding reducing nuclear arsenal, opposition against terrorism, piracy and proliferation of nuclear weapons, create the premises for a partnership. Nevertheless, Russia's and NATO's leaders did not permanently have the same vision, including in regards with the increase of the Alliance with new members, thus a clear, but cautious, cooperation position being necessary in regards with Russia's new approach.

Several governments from Central Asia admit and support the stability role played by NATO. Nevertheless, the lack of certain political and social reforms can balance the support of the population towards extreme organizations.

The Middle East continues to be an important regional instability factor, having four major trends which will continue to affect the security of the Alliance: extremist violence, Arab-Israeli tensions, dissolution tendencies of authoritarian governments (the Syria case) and the non-conformance policies of the Iranian government with UN's Security Council regarding its nuclear program. Besides these, Teheran's latest preoccupation in the field of anti-navy missiles creates suspicions in connection with the security of navy traffic in this area. With all ongoing diplomatic efforts, it is difficult to give a prognosis of the area's development (Denmark and Mulvenon, 2010).

In the Asia-Pacific area, Japan, South Korea, China, India and Australia are considered as countries which target stability and acceptance of present international laws. Instability sources in this area are assessed as coming from North Korea and the Indian - Pakistan conflict, both countries having nuclear vectors.

Africa, even though it shows economic progress, is still facing severe problems, especially coming from the Democratic Republic of Congo, Somalia and Sudan, existing the possibility for NATO being called to support these areas, especially through peace sustaining missions, anti-terrorist activities and military training (Bedford).

Latin America, the Caribbean and North America have to intensify their fight against criminality. The American States' Organization is responsible for the security of both continents, NATO's involvement being less probable in this area.

1.3.3 From the suggestions and recommendation of the group of experts to the new Strategic Concept. A comparative approach

Even though it is easy to understand the fact that the final document approved by the members of the Alliance has a more unifying character in comparison with the document suggested by the Work Group, we think that a comparative approach is useful, even if it is from the perspective of identifying certain aspects which can create subsequent reflection topics.

Basic missions

The final text of the Strategic Concept notes only three of the four basic missions suggested by the work group. The document of the Work Group suggested to expressly specify the *"enhancement of the purpose and management of partnerships"*.

Another interesting aspect is that the initial suggestion named *"the Alliance has to maintain its discouragement and defense ability"* was replaced with the final form *"collective defense"*. The initial form can be found in the final document in a separate chapter, but having a distinct meaning. The work group suggested justifying this mission by the possibility of an emergence of dangers both inside and outside the Alliance, and, as a consequence, the Alliance has to be ready to countervail (discourage) these types of actions, regardless of their location. The final approach, being actually more detailed, brings some more clarity in regards with actual action directions and regulates the regional defensive role played by the Alliance.

Another new aspect is represented by placing basic missions inside of principle 4 out of 6, as a type of counteracting against the challenges identified against the Alliance and its members. The missions are:

- Collective defense;

- Crises management;
- Cooperative security.

Partnerships

The globalization process diminishes and interconnects the world or, according to Flournoy and Brimley, *"globalization is the connectivity tissue of the international system and of our global society"* (Flournoy and Brimley, 2009).

The document of the Work Group states a series of clarifications regarding the concept of *"integrating approach"*. NATO's success depends on the way in which the Alliance is able to work together with other security suppliers, be it as a leader, or having a complementary role, in a common strategy. The integrating approach does not target acquiring a global role of the Alliance, but instead targets the ability to work in partnerships, integrating the military, political, economic and social fields, without creating subordination relationships. In this context, the importance of a unique committee, recently established, which manages all partnerships, is pointed out. The new Strategic Concept, by recognizing partnerships, will lead the actions of this forum.

Specifying the term *"operational partner"* in both documents is also a new aspect. This defines a certain country which is part of a NATO mission, but it is not a member of a partnership structure. Nevertheless, the final document states *"offering a structural role in the strategic and decisional process of NATO's mission"*, but strictly focused on commune missions³¹.

Even though the openness to *"any nation or organization of the world which shares common ideals"* is stated, the expressed intent for other partnerships is not stated, stating only the development of existing ones.

Cooperation with UN is stated as an important aspect in both documents. Furthermore, on a military level, NATO's commandment for transformation - SACT - states the importance of coordination between the two central commandments together with the relationship with EU, as being essential relationships for the future.³² The initial draft states the *"disappointment of UN's staff regarding the level of security offered by NATO and also the poor coordination in the operational theaters"*. The final document states the 2008 NATO-UN declaration, highlighting the need for improving the connection between the two Commandments, the need for regular political consultations and enhancement of practical cooperation in managing crises. The suggestion regarding the explicit statement of NATO's availability on the request of UN for acting in cases of massive human rights' infringement or humanitarian emergencies is not take over. We consider that this aspect is due to the intention of avoiding legal conflicts and overlapping of competences. Also, this aspect creates the premises for interpreting the Alliance as being a global actor, aspect which contravenes with the spirit of the document. Also, we should note the omission of the cooperation between the two institutions in regards with Resolution 1325 of the Security Council regarding women's role in peace and security. Probably, this suggestion is not compatible with the set of principles and missions of the Alliance, mainly addressed to security issues, being more connected to UN.

³¹ This role is necessary, taking into consideration the efforts made by these states in certain operations - ISAF being an example (Aybet, 2010)

³² SACT letter to CHODs 12 April p. 11; SACT remarks, The European Institute Cosmos Club Washington, DC June 2, 2010 p. 3, 5

The partnership with the European Union (EU) is considered as being "unique and essential" due to the fact that most members of the Alliance are members of both organizations. Dr. Binnendijk considers that the cooperation with EU can be materialized by means of multiple common projects, from creating a Civil Emergency Planning Centre (*NATO-EU JCEPC*) and continuing with integrating NATO EU navy operation (Binnendijk and Hoon, 2010). The negative connotations of the work group's document, like the unfortunate duplication of abilities and occasional misunderstandings between the two organizations, were intentionally omitted, recognizing the importance of the Lisbon Treaty - which offers a framework for enhancing EU's ability to manage common security challenges. This approach is in accordance with the before-mentioned partnership principles, EU managing already stability and reconstruction missions, for example the Althea mission in Bosnia. Besides, the final document states the partnership with EU as being a "*strategic*" one, aspect which was not stated in the suggested document. Also, "*the spirit of openness, transparency, complementarity and respect for the institutional integrity of both institutions*" is stated. A relevant aspect is the desire for cooperation in developing new abilities in order to diminish the duplication of efforts and maximizing the efficiency of expenses. All these elements set the basis for a pro-active approach, seeking cooperation in the spirit of an integrating approach.

The omission of the partnership with OSCE from the suggested document is also to be noted. In the suggestion made by the Group of Experts, the relationship with OSCE is presented as being more "intimate than with many other organizations", aspect determined by the status of NATO's co-founder during the Helsinki Protocol and its substance role had in developing the political-military dimension of OSCE. I consider this omission as being an aspect of vigilance of the Alliance in regards with the perspectives of this organization, in the context of redefining the map of influence on a global level.

The partnership with Russia brings a series of important amendments in regards with the document suggested by the Group of Experts. The first one is the status of "strategic importance partnership" given by the document and also the desire to transform it in a strategic partnership, acting based on expected reciprocity from Russia. The final document talks about the foundation of the relationship based on the agreements of the Founding Document and of the declaration from Rome and talks about promoting political consultations and practical cooperation with Russia in common interest fields, including anti-missile shield, fight against terrorism, fight against drugs, fight against piracy and promoting a wide international security. At the same time, the document promotes the usage of the entire potential of the Council of NATO-Russia, even though it does not state, in accordance with the suggestions, the 2008 Action Plan against terrorism.

Generally, the tone of the final document is visibly enhanced in comparison with the suggestions of the Work Group's document, starting from an initial cautious approach and being more optimistic at the end. The substance amendment between the two texts is based, probably, on the last moment participation notice of Russia at the NATO Summit from Lisbon, where the document was adopted, concurrently with its decision to take part at the anti-missile shield project.

The relationship with the Euro-Atlantic Partnership's Council is offered a similar status with the PfP relationship, even though in the work group's document there is a rigidity stated in regards with the first one. Both institutions are considered as being central items in the European relationship, the Eurasia component not being stated. The relationship with the Mediterranean Dialog is placed in the same paragraph, just like the relationship with the Gulf's area, especially the Cooperation Initiative from Istanbul.

The partnership with Georgia and Ukraine is stated, through existing separate commissions. An interesting aspect is the expressed statement at this point of the summit's decision from Bucharest, an aspect which did not exist in the suggestions of the work group. In the adopted text, the issues from the draft are not stated, like ethnicity disputes, energetic insecurity, need for reforms, instead only the encouragement of the two countries' orientations and aspirations is stated.

One of the main omissions of the final document, contrary with the suggestions of the group of experts, is the one connected to the Middle East. In the suggested document, it is said that *"NATO has expressed its will to assist in implementing an agreement which can be adopted, based on the request of the parties and authorized by the UN Security Council"* and also the fact that NATO is a strong supporter of the negotiation efforts for a just and durable peace, even though it does not have an active diplomatic role. The hold-back of the members probably comes from the will of not importing the powerful instability of this area in the Alliance and probably from the will of not artificially inflame the settlement of the Iranian file, knowing the negotiation efforts of certain European members, actively employed in this diplomatic process.

Contrary to the recommendations of the work group's document, a series of states were not mentioned, each having a support role in certain conflict areas, like: Australia, New Zealand, South Korea, involved in supporting the Afghanistan mission, China as a participant at common UN and anti-piracy operations together with the Allies, countries from Central and South Asia which have played a major role in maintaining regional stability, and also India, Indonesia and leading democracies from Africa and Latin America which share the same common values with NATO in the field of peace and security. By this, I consider that the Alliance wanted to keep its Euro-Atlantic regional character and also its defensive character.

In this context, the conceptual platform which will facilitate the inter-connection with important worldwide organizations which offer security support is to be mentioned, this being the "comprehensive approach". Even though we will return with a short history of its development, it is interesting to know that this concept was initiated on a military level, through the ACT strategic commandment. SACT states that the implementation of this concept is one of the main priorities in the transformation process³³. In my opinion, the approach of this concept should be transferred from the strategic level, with its implications on the cooperation of the Alliance with international organizations and, to a national level also, where there is an almost the same inertia in integrating civil and military abilities. This should represent the starting point for the offer of national abilities. This approach requires a precise legal framework, derived from the framework document.

Security environment

The instability factors suggested by the group of experts are completely kept, without the frozen regional, ethnicity or religious conflicts.

It is to be noted the fact that, in the final document, there is a risk factor which is stated in a more evasive way in the document of the group of experts, regarding the development trends of advanced technology, including laser weapons, electronic war and technologies which limit access to space, all having a direct effect on NATO's plans and operations.

The new Strategic Concept does not keep the shape suggested for listing regional instability factors, with explicit mentioning of areas and countries with high exposure, even

³³ SACT letter to CHODs 12 April

though mentioning the danger created by ballistic missiles refers, through its nature, to the area of conflict from the Middle East.

Defense and discouragement

Contrary to the document of the work group, the New Concept integrates a series of sub-chapters, some of them being: nuclear weapons and control of weapons, anti-missile shield, reply to non-conventional threats (terrorism, cybernetic attacks, energetic security, climate changes), all in a common pack of commitments as a reply to these.

To be noted is the expressed mentioning, contrary to the suggested text, of the independent nuclear abilities of Great Britain and France, as an addition to the ones of USA, mentioned as assuring the supreme guarantee of the Allies. The need for re-establishing NATO's Special Consultancy Group for issues related to Weapon Control is not taken over, for the purpose of creating an internal dialog on this topic, even though in the subsequent chapter (security through crises management) the idea is resumed, but based on reciprocity, transparency and agreement of the host country.

Regarding counteracting terrorism, the final document does not take over the recommendation to enlarge the meaning and importance of the NATO project for "Fighting against terrorism" in the meaning of broadening the interest from the area of technological development to the area of collaborative research of investigation technologies, of discouragement and of creating social networks. Instead, it recommends a "more detailed analysis of the threat, of consultation with the partners" and also "support for training local forces in order to fight individually against terrorism". This approach, even if it is viable for the short and medium term, can generate, from my perspective, suspicions regarding the permissiveness of the Alliance in regards with access to internal procedures, creating premises for vulnerabilities of future operations.

It is interesting that the major role of an Excellence Centre, in this case being Cyber Defence COE, is for the first time mentioned in a document with an importance like this (be it only the document of the Work Group). The recent history of the network of Centres of Excellence and also the broad diversity, prove the increasing role of these in the future projection of the Alliance, with perspective until 2020. Their success will be assured by the ability of ACT NATO's Strategic commandment to efficiently coordinate these Centres in accordance with the needs of the Alliance.

The anti-missile shield, even if it is mentioned as a priority, does not explicitly refer to increasing the defense system against ballistic missiles - NATO ALTBMD Integrated Test Bed (ITB). Binnendijk and Hoon mention this aspect and also the encouragement of the Allies to participate at the development of SM3 missiles, based on Japan's model (Binnendijk and Hoon, 2010). The project represents a special importance for Romania due to the early diplomatic involvement and due to the ability to demonstrate to the Alliance Romania's important role of security provider. Russia is expressly mentioned as a main partner in this project, fact which can able to endorse its development, in case of a correctly committed partnership.

In the same context, the need for protecting access to space is mentioned, by accelerating the SATCOM 2000 project, fight measures against terrorism by extending the *Defense Against Terrorism* technological project in areas of social, human behavior and investigation methods studies, creating an information network available in real time and making available certain infrastructure facilities.

The threat of climate changes and the support of the Alliance in case of certain catastrophes is not approached in the document, possibly due to the incompatibilities of military

abilities with these types of missions. A partnership with UN, EU or other organization able to manage these types of missions should be taken into consideration, planning being decided based on the situation's specifics.

Security through crisis management

Crisis management involves three types of actions: prevention, crisis management and post-conflict stabilization and reconstruction. Prevention should be primordial, through a process of monitoring, analysis and identification of potential factors, followed by a quick and firm action which is aimed at limiting its effects which could escalate into a major crisis. A decisive role in the process of prevention is played by the exchange of *Intelligence* between the Allies, and also the analysis process connected with drafting up the prognosis of certain areas with a potential of instability.

Romania has an important role in this field, having developed important *Intelligence* abilities, out of which a level unit of information team. Our country is seen by the Alliance as a serious partner, offering many times useful and correct information regarding the evolution of the security situation and strategic interest. The development of NATO HUMINT Centre of Excellence from Oradea has to be seen from this perspective, being a part of a larger network of NATO. It is interesting to observe the fact that this Centre of Excellence is singular in the field of *Intelligence* abilities in NATO countries, having as a main objective, besides offering specific expertise in the Alliance, training of NATO soldiers in order to assure common standards and promote interoperability, an essential condition for operational success.

One of the concepts, which is relatively new, in the context of the Alliance's transformation is the one connected to integrated approach of performed operations, based on the lessons learned in Afghanistan and Western Balkans. From a political, civil and military perspective, the integrated approach is the only one able to assure durable success. Mentioning the development of a "modest" civil ability for managing crises in the Alliance is probably a clear signal for doctrinal and operational recalibration. This new item will probably take over the role of a core, having the role of offering an interface with the organizations during the performance of partnership civil actions in both phases of preparing and performing the operations. It is interesting to see if during military actions this procedure will be followed also by incorporating certain organic elements in the level of force commandment which should interact with the civil society, the civil-military component used in this moment being considered as insufficient.

The need for significant reshaping of the architecture of societies where crises appear, starting with the primordial need for offering public order structures from the civil population, their training and continuing with complex social-economical mechanisms, requires specialty assistance on a large spectrum which greatly exceeds the military area. The success of this approach will be conditioned by more factors, out of which we can present the following: political consensus of the Alliance, early coordination with civil actors and establishment of competences as realistically as possible etc. It is important to mention one of the lessons learned in Afghanistan, where the approach of certain harsh commitment rules has generated a significant decrease of the civil population's support. This aspect has created a new military approach, characterized by a new concept, which has the tendency to receive, at least partially, doctrine type of proportions: counter-insurgency (COIN).

Protection of civil population, the need for real unique commandment, handling was prisoners in accordance with international regulations, are relevant aspects also in the New Strategic Concept. The impact of their adoption can also be found in the Education and Training component of the Alliance, fact which requires adapting all types of exercises and trainings (but

not only) to the new approach. The main message is represented by the dictum: "*win the heart and mind of the population*", as a compulsory pre-condition of success.

Promoting international security through cooperation

NATO wants to have an important role in the activity of conventional and mass destruction weapons control, and also in the efforts for non-proliferation. Even though, through the regional character undertaken by the Alliance, the relationship with Russia is stated as being of a capital importance, maintaining the abilities in relationship with important global actors, especially with countries which have global influence ambitions, like China, India etc., is still important from the perspective of overlapping interests in a certain area, given the expeditionary trend of the Alliance's subsequent missions.

One of the deep transformational partnership aspects is the one connected with the relationship with UN, recognized by the New Concept as being an essential one. Besides the legitimate character offered to NATO operations, UN plays a global role and has significant resources in order to assure success in case of a common approach of an identifiable crisis. Furthermore, the importance of effective cooperation between the two institutions also results from the *NATO-UN Declaration* signed in 2008³⁴, however the need for central commandment cooperation being pointed out, especially during the period before a conflict.

The partnership with EU is recognized as being one of NATO's keys of success. Freshness is created by the will for complementarity between the two institutions, opposed to any suspicion of competition. Advantages also come from efficient usage of resources and from the abilities of both organizations' members, given the fact that European countries belong to both organizations.

Reform and transformation

The need for reform is explicitly mentioned in both documents. This has to be centered on the sufficiency of resources, be it financial, military or human. One of the topics intensively mentioned in the document of the work group is assigning enhanced powers to the General Secretary in implementing the reform agenda, aspect not mentioned in the final document.

Furthermore, besides a few main action principles connected to the ability to dislocate forces, efficient planning, congregated adoption of abilities and keeping or developing common abilities or standards, there is no long term deep reform agenda identified, in accordance with the suggestion of the work group. The solutions suggested by the work group targeted, among other aspects, the following: rationalization of the International Secretary, review of financial stipulations, cost reduction of commandments' operation, reduction of the number of committees and agencies, establishing quantitative targets for the purpose of cost reduction in different administrative categories and redirecting these savings towards operational abilities and readiness for fighting. The suggestion for changing the Alliance's decision is also interesting, within the meaning of keeping the consensus only for extremely important decisions, like the ones related to Art.5, budgets, new missions or acceptance of new members. The suggestion to assign the General Secretary pre-commissioned authorities, based on certain agreed employment rules, in order to efficiently respond to emergency situations, like missile attacks or cybernetic attacks.

Some of the suggested measures, which cannot be found in the new Strategic Concept or in the document of the work group, are: creating a NAC crisis management Centre, revitalized;

^{34***}, *Joint Declaration on UN/ NATO Secretariat Cooperation*, 04 December 2008, at <http://www.emg.rs/en/news/region/71702.html>

creating a NATO strategic analysis ability; reorganizing the North-East Multinational Body in order to create a Collective Defense Planning General Headquarters (CDPS) under the direct command of SACEUR. An interesting aspect is represented by the detailed suggestion for expanding its existent component with other states, like Romania, USA, UK, France, Turkey, Norway, Canada and other Baltic countries, with deployment in Poland. This aspect can be seen as a proof of recognition and trust in the Romanian military system, and also as a set of operational partners which have confirmed during important missions.

The ACT NATO commandment, having the "think tank" role in the Alliance, is requested to coordinate re reform and transformation process of NATO' military abilities. NATO's supreme transformation commandment - SACT - approaches this task in an integrating manner and asks the nations to evaluate their abilities and, subsequently, to coagulate the national transformation entities in a larger transformation network³⁵, together with other organisms belonging to ACT, like the NATO Centres of Excellence etc. The benefits are relevant, through the immense multiplication of expertise, learned lessons and increasing of trust between the members of the Alliance.

1.3.4 Grounds of conceptual evolution in NATO

NATO's redefinition is given by three major principles: its missions, operational framework and its operations (Cox, 2005).

One of the topics of interest in the negotiations for the New Strategic Concept was created by the role undertaken by the Alliance from the perspective of geographical coverage - increasing the area of interest on a global level or keeping its regional size. The precedent created by UNSC by resolution 1510 from the 13th of October 2003, when NATO was authorized to take over the ISAF commandment, has created the premises for a global development of the Alliance, both geographically and functionally³⁶. Identifying the quality of the majority of NATO members belonging to EU and the subsequent Eurocentric geopolitical interests have prevailed in front of global aspects (Dukes, 2008). Another immediate effect of this is also the acceptance of favored extension with European members³⁷.

The European Security Policy, ESDP, is seen at this point as "*a sui generis entrepreneur of civil-military crisis management*" (Howorth, 2003, 209). By accepting the powerful partnership stated in the final document, the increase in relevance of the military dimension is also expected, without a duplication of NATO's abilities.

An interesting perspective is given by the development of certain measures approved by the Alliance, at each summit, starting with 2002 in Prague. For this, the increase of number of capability categories from 5 to 8 in the Initiative for Defense Capabilities, establishment of ACT NATO commandment and NATO Response Force were decided.

The 2006 Riga Summit has brought the adoption of the Integrated Policy Guideline concept, referring to the framework and priorities of aspects connected with the Alliance's abilities, planning and intelligence for the predictable future. One of the decisions was in regards with the ability to deploy 40% of the national terrestrial forces, out of which 8% completely sustainable, afterwards being increased to 50% - and 10%.

³⁵ SACT letter to CHODs 12 April 2010

³⁶ ***, NATO, 2002, *Prague Summit Declaration*, 21 November 2002, paragraph 3

³⁷ ***, US official at NATO, 2010, Interview of a US Official at NATO, Interviewed by Guillaume Nicaise, London, 09/09/2010. Appendix IV.

The 2009 Strasbourg-Kehl summit has agreed on adopting a Security Declaration which highlighted the implementation of the Integrated Policy Guidelines' stipulations, and also on the intention for creating a multinational special force commandment.

The result is diverse. The implementation rhythm was slow, both due to budgetary restrictions and due to the lack of political will. Positive results come from the operational field, especially Kosovo and Afghanistan. The ISAF mission has shown the need for deployable and sustainable forces, and also the need for a common approach in operations against insurgency and in regards with inter-operable abilities of command, control, communication, computers, intelligence, surveillance, recognition (C4ISR).

Non-honoring of certain commitments of the Allies, and also the assignment of at least 2% of the GDP for defense (excepting five members)³⁸, the lack of success in creating deployable and sustainable forces and assigning at least 20% from the budget of defense to investments, are considered to be the main causes for creating a major offset between the European and American forces, and also the real lack of transformation in regards with the firstly mentioned.

The need for reform contains the need for conventional defense, like: reassurance of the commitments of Art.5, fulfilling the objectives of deployment and sustainability, extending the role of NRF, capitalizing the similarities of the missions of Art.5 and expedition, understanding C4ISR as a NATO operational binding, enhancement of the abilities of special forces, enforcing the role and mandate of ACT NATO's commandment, transformation of NATO's training and education, enhancement of navy monitoring.

Structural transformation solutions were agreed on at the June 2010 NATO ministry meeting, where both the decrease of number and size of commandments and also the 3/4 decrease of the integrated military structure were agreed on (Maulny, 2010).

Maybe one of the most important transformation directions of the Alliance is the one of partnerships. This comes from the Alliance's need for civil expertise and is expressly materialized in the relationship with UN and EU. These two organizations also benefit from the „Berlin Plus” framework agreement and "Berlin Plus Reverse" agreement³⁹, and also from the UNSC decision for adopting the civil-military Crises Management Concept (Howorth, 2003). The work platform for implementing this dimension will be generated by the Integrated Approach concept and also by the way in which it will be applied.

The following factors can create divergences in the Alliance, and, implicitly, in the future conceptual approach of the Alliance: understanding discouragement, identifying a common enemy, perception regarding terrorism, nuclear policy, budget assignments and performance discrepancies, approach of Art. 5 from a Euro-Atlantic or global perspective (Ozaki, 2006).

The New Concept creates the needed framework for a development commonly agreed by its members and, just like Karl Deusch states - *"the aspect which characterizes a common security is not the absence of conflict between the members, but rather the amicable settlement of these"* (Gheciu, 2008, 3).

1.4 Transformation in NATO

Starting from the need for transformation as an adaptive and preparing reply to challenges and threats which are more and more complex and interconnected in the nowadays security environment, but also counting anticipated developments, the North-Atlantic Alliance has to have

³⁸ ***, *News Analysis: Where is NATO heading?* Xinhua, 18.11.2010

³⁹ ***, NATO, 2006, *Berlin Plus Agreement*, 21.06.2006

structures, capabilities and connections which can offer it an efficient and adequate projection, able to demonstrate its determination as a regional security organization, but with a relevance which exceeds a strict geographical area.

The starting point for the NATO transformation process can be found in the 1990 London Declaration⁴⁰, which created the needed opening to previously communist countries and has highlighted the Alliance's need for adaptation to the new geo-political realities generated by the dissolution of the communist bloc, militating even for making the North-Atlantic Alliance an agent of change, able to promote European security and stability by both military and political means.

The NATO Summit from Prague (2002) has offered a new dimension to the idea of transformation, confirming NATO's commitment for transformation in front of new global threats.

NATO's constant process of change reflects cultural and institutional changes on all levels, by virtue of determining vectors which evolve both *top-down* and *bottom-up*, representing, on one side, the pressure of political-military requirements and, on the other side, the need for change determined by actual functional realities (expressed through learned lessons, promoting good practices and valuing experience gained in different actions, operations, inter-institutional relationships etc.).

By virtue of these determinations, NATO's military transformation requires structural reorganization, re-equipment for interoperability requirements, and also a new approach of challenges, by means of capabilities. As the Czech president observed before the 2002 Prague NATO Summit, transformation targets numerically decreased forces, but robust, benefiting by high mobility, technological development and high specialization which can be offered by the contributing nations, and also by ability of cooperation (by means of interoperability) in the framework of diverse missions⁴¹. The transformation process was defined in 2003 by Admiral E. P. Giambastiani (ex-commander of ACT) as a change vector in regards with NATO's doctrine, organization, abilities, training, logistics and mentality of the Alliance⁴².

Besides any technical detail, we start with the premise that the most important aspect of NATO's transformation agenda is its own reform, aimed at promoting new terms of political dialog between the allied states, creating a debate forum regarding controversial security and political aspects and targeting the clear definition of the common purpose needed for offering the necessary identity.

As we will show in the following sub-chapter, the key element for command, control and coordination in this direction is represented by a specially created structure - *the Allied Command Transformation*, which, after more than seven years from its establishment, completely proves its ability to manage NATO's transformational phenomenon, in all its dimensions.

⁴⁰ ***, *Declaration on a transformed North Atlantic Alliance issued by the Heads of State and Government participating in the meeting of the North Atlantic Council ("The London Declaration")*, London, 6 July 1990, in <http://www.nato.int/docu/basic/b900706a.htm>

⁴¹ www.hrad.cz/president/Havel/speeches/2002/1905_uk.html

⁴² Quote from Col. Steward E. Remaly, *NATO transformation: finding relevance in coping with the asymmetric threat of terrorism*, USAWC Strategy Research Project, U.S. Army War College, Carlisle Barracks, Pennsylvania, at <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ada424248&Location=U2&doc=GetTRDoc.pdf>

1.4.1 The Allied Command Transformation

The Allied Command Transformation (ACT) was established on the 19th of June 2003 together with the Allied Command Operations (ACO), as a result of the restructuring of NATO's command structure initiated in 2002 at the Prague Summit, for the purpose of increasing flexibility and organizational efficiency.

The ACT was created on the structure of the Atlantic Allied Command (ACLANT) in Norfolk, which, together with the European Allied Command (ACE), were set as strategic commands at the end of the Cold War, strictly based on geographical criteria. Their reform has outrun this reference, focusing on the principle of operation in two areas of major importance: NATO operations (completely taken over by ACO) and the transformation of the Alliance - ACT's major task.

The Supreme Allied Commander Transformation (SACT) subordinates to NATO's Military Committee (MC), the organization's military authority - made up of the military representatives of Defense Chiefs of the NATO member states - which operates under the political authority of the North-Atlantic Council (NAC) and the Nuclear Planning Group - NPG. The basic role of SACT is to follow the strategic transformation of military structures, forces, abilities and NATO doctrines, giving, for this purpose, recommendations to the political and military authorities of the Alliance.

In order to reply to the requirements of transformation, SACT promotes a multilateral vision which involves the commitment of all four power agents of each nation - political, economic, military and informational - and their integrated application, on the level of the Alliance, aiming at standardization and interoperability, performance of congregated operations based on effects in the entire spectrum of conflicts, by virtue of a comprehensive approach of the operation, development of deployment forces able to face a wide spectrum of challenges, up to the education and training of forces, and development of new concepts and doctrines, assimilation and harness of the lessons learned etc.

In this meaning, the vision regarding ACT's development, which was expressed by SACT, is conclusive and it can be found in key fields which are covered by the ACT Strategic Plan for 2010 - 2013:

- substantiating ACT as a think-tank in NATO's profit;
- identifying and prioritizing deficiencies in the field of abilities, regarding both the ones that are emergent and the ones that are for the long term;
- establishing a network with high efficiency, which is able to inter-connect national efforts in the field of transformation, mainly in regards with developing abilities and training;
- strengthening pragmatic cooperation with the partners in the field of security - EU, UN and partner nations;
- catalyzing the efforts for operating the comprehensive approach.

Due to the expectations and attitudes oriented towards the permanent horizon of change, ACT is considered to be the foremost agent for changing, leading, facilitating and promoting the continuous enhancement of the Alliance's capabilities, aimed at maintaining and enhancing the military relevance and efficiency of NATO.

Thus, it promoted the transformation efforts of the allied nations, acting for the purpose of assuring the basis of the reference concept, exploring the strategic environment of the future,

defining the planning and leading methods of the operations and also the military abilities needed by these; at the same time, ACT determines the development and implementation of new abilities, techniques, tactics and procedures which should be used by NATO forces.

Another activity direction is represented by developing new abilities, in accordance with the Prague document - "the Prague Capabilities Commitment" (PCC), as a continuance of the Initiative regarding Defense Capabilities, initiated at the 1999 Washington Summit, which targeted both the interoperability of the Allies and their development in the field of military capabilities, needed for facing the new security challenges. PCC was considered as being a material initiative, substantiated and better focused than its predecessor, with quantifiable purposes, which were reaffirmed at the following reunions of the Organization.

Thus, transformation in the field of military forces had three main purposes: *enhancement of decisional efficiency, creating certain coherent effects in battle areas and assuring the projection (dislocation) and sustainability of the gathered forces*. The achievement of these challenges creates the characteristics of a transformed force, able to operate in the entire spectrum of conflicts. For this purpose, these have to be agile, expeditionary and gathered, quickly deployable and able to perform operations in a networked approach, to have technical superiority, and to benefit of continuous and sufficient logistical support, regardless of the period and rhythm of the operations, through an integrated system.

Together with the economic crisis, the manifestation of reluctance of certain European partners in fulfilling their undertaken obligation and the differentiated participation at the Alliance's operational efforts, NATO has reconsidered PCC, counting on other methods, pragmatic ones, in order to preclude different shortages: national "specialization", clustered acquisitions, multinational development, or common financing of certain specific capabilities.

A third dimension of capabilities' development is represented by NATO's ability and promptitude in protecting its power anywhere in the world, necessity covered by creating the NATO Response Force (NRF), a real catalyst of the Alliance's transformation, through parameters which define it as being an advanced entity: technological development, flexibility, deployability, interoperability and sustainability of all its components (land, air, navy and special forces) and through the common ground represented by the standardization promoted in exercises, where the newest operational concepts are being applied and the most modern technologies, techniques, tactics and procedures are being used.

Figure 3, where ACT's structural items are presented (without detailing the flow chart of the command group and headquarters - HQ SACT), is relevant in regards with structural-functional adaptation, in a manner in which the needs for adaptation, represented by pillars of transformation, are met as satisfactory as possible throughout:

- development and promotion of issues of strategic importance to transformation; articulation of policies to direct Alliance transformation efforts; supporting the development of NATO strategic-level concepts which clarify how transformation may be achieved;
- description of requirements, capabilities, defense planning and implementation of requirements and capabilities;
- listing future joint and combined capabilities, research and technology;
- experimenting, joint exercises and evaluation;
- education and training in a joint concept.

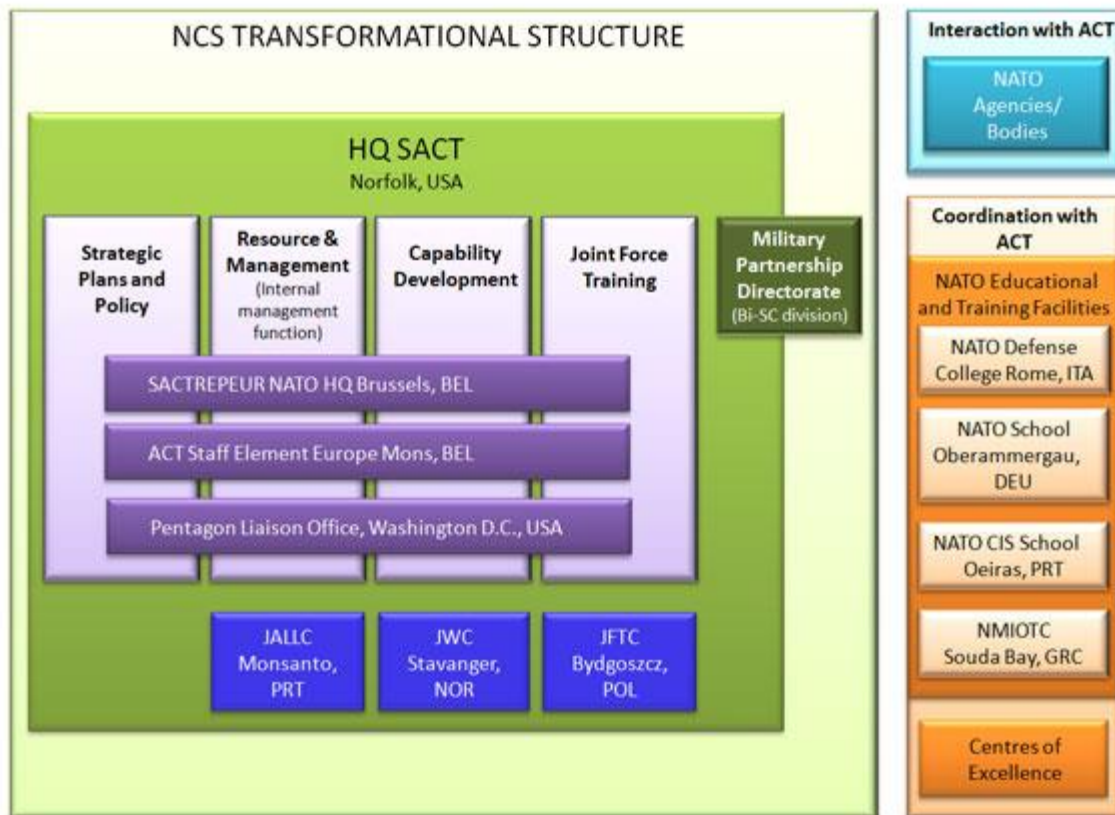


Figure 3 The structure of the Allied Commandment for Transformation (2016)⁴³

The headquarters of ACT, located in Norfolk (Virginia, USA), is the one that directs the subordinated command elements and coordinates - or it coordinates its actions in connections with - the associate or partner structures. This is made up of the command group, the Transformation Directorate, the Transformation Support Directorate, National Liaison Representatives, the PfP staff and Reservists responsible to HQ SACT. The responsibilities of these structures area clearly determined in the departments and sub-departments.

The Transformation Directorate (under the command of the Chief Deputy of Transformation Headquarters) subordinates:

- the Implementation Department (with two directions which work on a multinational and joint level (inter-categories): Joint Education and Training (JET); Joint Experimentation, Exercise and Assessment (JEEA);
- the Capabilities Department (with three directions: Strategic Concepts, Policy and Interoperability (SCPI); Defense Planning (DP); Future Capabilities, Research and Technology (FCRT);

The Transformation Support Directorate is made up of:

- Resources and Logistics sub-department (with one direction, homonym);
- C4I sub-department (Command, Control, Communication, Computers and Information - with two directions: C4 and Information).

⁴³http://www.nato.int/cps/en/natohq/topics_52092.htm#

One element of the ACT command - the representative of SACT in Europe (SACTREPEUR) from the General Headquarters of NATO (Brussels, Belgium) assures the connection between SACT and the political-military level of the Alliance, and ACT Staff Element Europe (SEE), located in Mons (Belgium), has responsibilities in the field of defense planning.

Functionally, the fields of ACT's Objectives of Transformation, in the commandment structure, are represented by teams with integrated capabilities, made up of specialists who manage key aspects connected with:

- Effective Engagement (approach based effects of operations);
- Joint Maneuvers (quick engagement and precise and continuous directing of the Alliance in military and non-military operations);
- Enhanced civil-military cooperation – *Enhanced CIMIC* (informal or occasional interaction between NATO and other entities, taking the shape of certain concepts in the field of politics, military, economy and civil);
- Expeditionary Operations (the ability to deploy groups of corresponding forces, where and when needed);
- Information Superiority (gathering of opportune and exploitable information, needed for assessing, deciding and acting decisively);
- NATO Network-Enabled Capability – NNEC (ability to provide, access, exploit and disseminate, in a system of connections which define a network type of information infrastructure, different military and civil capabilities on all levels);
- Integrated Logistics (synchronized management of operations for logistical support, by optimizing all logistic capabilities).

ACT coordinates a series of structures with distinct tasks in the spectrum of transformation.

The Joint Warfare Centre (JWC), located in Stavanger, Norway, offers the needed support for collective training on an operational level (in the pre-deployment phase) and the staff's certification which incorporates the structures and components of the commandments gathered in operation theaters, and also the training of NATO's Response Forces' managing teams. Also, it promotes and performs experiments, contributes to doctrinal development and to the process of analysis, aimed at maximizing the transformation's synergy and at enhancing capabilities and the level of interoperability in NATO.

Subscribed to these objectives, JWC subordinates the Joint Forces Training Centre (JFTC) from Bydgoszcz, Poland and the Joint Analysis Lessons Learned Centre (JALLC) from Monsanto, Portugal.

JFTC provides combined and joint training, static and distributed as well as single- and multi-echelon, for tactical level headquarters, staffs and forces over the full spectrum of Alliance operations, to include support of Alliance current operations and the NATO Response Force, supports concept development, experimentation and doctrine development, and ensures the integration of new concepts and doctrine into training⁴⁴.

JALLC is NATO's agency responsible for strategic and operational assessment of operations, exercise and experiments, and also for collecting and communicating lessons learned in the Alliance, hosting and managing for this purpose a holistic database aimed at supporting doctrinal development and enhancement of NATO's force activities.

⁴⁴<http://www.jftc.nato.int/structure/organization/hq-jftc/structure>

Besides these, ACT supervises the activity of a number of NATO education and training facilities: NATO Defense College from Rome, NATO School Oberammergau, Germany, NATO Communications and Information Systems (CIS)⁴⁵ and NATO Maritime Interdiction Operational Training Centre⁴⁶ from Souda Bay, Greece, which are mainly focused on education in different subjects for large groups of students, military and civilians, belonging to allied or partner states and also to organizations with which the Alliance works together (Simion, 2009).

An important aspect, through the contribution brought to the transformation process managed by ACT, is the relationship with the United States Joint Forces Command (USJFCOM), aspect which assures the connections with the transformational initiatives of USA and creates a bridge in the relationship with the European Allies, with other NATO agents and structures, with the network of NATO Centres of Excellence, and also with partner states and institutions.

1.4.2 Aspects of transformation in NATO

As we have shown previously, the main responsibility for NATO's transformation belongs to ACT. An analysis of the strategic objectives of this commandment is relevant in regards with the committed responsibility fields, and also with the coordinates by which the transformation process is understood, altogether.

In order to offer the management of NATO's military transformation process, ACT approaches fields like: education and training, conceptual development, comprehensive approach, experimenting, scientific research, technology with military application, all connected to the actual needs expressed on the level of the Alliance's current operations and in connection with NATO's Response Force.

Conceptual development and experimentation is a process dedicated to the development and assessment of new concepts, aiming at identifying the best solutions from every point of view (doctrine, technical, organizational, material, procedural or in regards with training) in order to achieve significant advantages in operations, as a phase before assigning certain significant resources for the targeted changes. By this process, based on resources, the testing of validity and feasibility of the project is offered, exploiting the results of other connected studies and experiments.

In this process of conceptual development, working groups and groups of experts are involved, which assess proposals⁴⁷, analyze courses of action, perform research - development activities, collaborate with different specialized structures which offer testing and experimenting opportunities - in the framework of exercises, technical experiments or operational environments.

Promoting innovative thinking, aiming at quality and promptitude, anchoring in real parameters and a critical balance between the expressed ambitions and means of performance, the ACT staff operates in order to develop the command for acting as NATO's think-tank⁴⁸, able to offer an extensive understanding of the evolution of the means of battle, and also of the adequate

⁴⁵http://www.nciss.nato.int/historical_background.php

⁴⁶http://www.nmiotc.nato.int/#general/mission_roles_en.htm; NMIOTC is associated to ACT in a similar way as the other NATO education facilities. The center provides theoretical and practical training to NATO personnel and Non NATO partners, within Maritime Interdiction Operation (MIO) context.

⁴⁷ Which come from NATO nations or partners, from the military industry or organizations with interests in the field of safety, generating analytical activities, headquarter processes, operational experience, academic environment etc.

⁴⁸https://transnet.act.nato.int/WISE/CollaboCat/LoE1/index_html

answers to these developments. A series of issues which were suggested for assessment in this framework aim at⁴⁹:

- assessing the requirements of transformation from the perspective of resources' austerity;
- development of the new Strategic Concept's benchmarks;
- specialization of the support of smaller nations in NATO and development of their niche capabilities;
- strategic communication (media "battle");
- development of the Future Multiple Scenarios (MFP) by assessing certain new risks;
- creating a directive in regards with working with indigenous security forces;
- energetic security;
- development of the collaborative interaction framework.

The conceptual level of transformation is exploited and finds its practical applicability in the large specter of capabilities defined by the acronym DOTMLPFI (*Doctrine, Organization, Training, Material, Leadership and Education, Personnel, Facilities, Interoperability*)⁵⁰.

The development of these capabilities from a conceptual perspective is influenced not only by the dedicated structures of the Alliance. Due to the fact that even ACT is facing budget adjustments, the need for making the entire process more efficient becomes more and more stringent. As shown by the former ACT commander – general Stephane Abrial – in his speech in a session of the North-Atlantic Council⁵¹, fructifying any type of national support is necessary – this being especially felt in the network of transformation (which includes, on top, NATO Centres of Excellence) and in different types of partnerships (indicating here the PfP Consortium of Defense Academies and Institutes for Security Studies⁵²).

These also become a part of the educational and training process, starting from the principle of complementarity with NATO structures and specific expertise.

The field of education and training in NATO has both generous curricula and modern and efficient means of knowledge transfer and of ability training. Thus, besides the specialization trainings which target promoting NATO's operational concepts for the purpose of transferring the know-how (a view of the range of courses covered, at operational level, by the NATO School from Oberammergau⁵³ is relevant in this meaning), standardization and interoperability of allied and partner armies, there are on-line documents for the purpose of familiarizing with these aspects (on Advanced Distribution Learning(ADL)*e-learning* platforms⁵⁴), but also mobile training teams able to perform teaching, mentoring and training for specific activities.

Connected mainly to the practical side of training, the Command perform exercises⁵⁵ which target training and gaining experience, testing and validating staff and structures (components of:

⁴⁹ ***, ACT, *Possible Think Tank Issues 2011 Onward*, in https://transnet.act.nato.int/WISE/CollaboCat/LoE1/index_html

⁵⁰ <http://www.dotmlpfi.com/dotwhat.html>

⁵¹ Speech of ACT's commander during the North-Atlantic Council, General Stephane Abrial, *NATO Transformation*, 10th of March 2010, at <http://www.acus.org/event/general-stephane-abrial-nato-transformation>

⁵² <http://www.pfpconsortium.org/>

⁵³ ***, NATO School Oberammergau, *Course guide and POI*, at <https://www.natoschool.nato.int/academics.asp>

⁵⁴ https://jadl.act.nato.int/ADL_Courses/

⁵⁵ The annual program of Training and Exercise (MTEP - Military Training and Exercise Programme) is commonly developed by ACT and ACO, providing detailed information regarding the planned activities, based on identified priorities and purposes of command. The normally include topics connected to current and future operations, NRF, experiments of the transformation process, activities from NATO's cooperation programs (for example, MTEP for

concept, doctrine, procedures, systems, tactics) - especially of those which are about to be deployed in theaters of operations or the ones intended for NRF, the degree of interoperability⁵⁶ and the level of defense reform (especially for partner states)⁵⁷. Exercises that cover the entire spectrum of military operations (from battle to humanitarian operations, stabilization and reconstruction), being ACO's responsibility, benefit of ACT's support in the field of planning, execution and assessment, but also of the assistance of the NATO network of educational, training and assessment institutions, or belonging to the involved national structures⁵⁸.

Pursuing technological supremacy, the transformation effort from the technical field aims various aspects, starting from developing specific IT programs and up to developing and enhancing devices, equipment and other specific technical means needed for the activities of the forces deployed in operational theaters and also for battle support items (operational assistance⁵⁹ and fire support) and services and logistic support. This fact implies also the opportune assessment of emergent technologies and of the usage potential of these against the interests of the Alliance, this creating the needs for developing the capabilities of detection, identification, localization and engagement of threat sources.

The Directorate of Future Capabilities, Research and Technology from the Department of Capabilities of the Transformation Directorate is the reference structure of ACT in the relationship with the defense industry branch. In the same field, NATO Communications and Information (NCI) Agency⁶⁰ and NATO Science and Technology Organization (STO)⁶¹ represent, through their products, reference structures in the field of technological transformation.

Through all these efforts, ACT supports another own objective - providing the needed support of NATO's missions and operations. Military operations are the ones that, on one side, actually validate the real adaptive solutions, equally becoming an engine of the evolution created by real needs, acknowledged and assimilated as lessons in the theaters of operations.

The need for change is strictly connected to adapting force to the type of targeted mission. Logically, there is a clear causality relationship between the evolution of the security environment and the amount of realities which require military intervention as an option for settlement, in a large typological spectrum: conflict prevention, crises management, preserving peace, intervention in case of disasters, humanitarian aid, situations which require the development of flexible capabilities, adjustable based on specific requirements.

2010 is available at <http://www.aco.nato.int/resources/1/EXERCISES%20ACO%202010.pdf> , accessed in December 2010)

⁵⁶ Forces which are under NATO's command have to be able to act efficiently together, regardless of the differences existing in doctrine, language, structures, techniques, tactics, procedure, training, equipment etc (see Document C-M(2009)0145 - NATO Interoperability Policy, December 2009 at

[http://www.tradoc.mil.al/Standartizimi/Downloads/C-M\(2009\)0145%20\(NATO%20POLICY%20FOR%20INTEROPERABILITY%20AND%20STRATEGY\).pdf](http://www.tradoc.mil.al/Standartizimi/Downloads/C-M(2009)0145%20(NATO%20POLICY%20FOR%20INTEROPERABILITY%20AND%20STRATEGY).pdf))

⁵⁷ It is important to highlight the fact that the exercises are equally targeting both the military and the civil structures of the Alliance, aiming also at training the top decisional architecture and capabilities of it

⁵⁸ <http://www.nato.int/issues/exercises/index.html>

⁵⁹ Command, control and communication, support with information, security, sapper support and support against nuclear, bacterial, chemical mass destruction methods

⁶⁰ <https://www.ncia.nato.int/Pages/homepage.aspx>

⁶¹ <http://www.sto.nato.int/>

For this purpose, five categories of capabilities were aimed⁶²:

- mobility and deployability;
- sustainability;
- efficient commitment (in operations with variable intensity);
- force and infrastructure protection;
- interoperable communication.

The need for mobility and sustainability has led to the need for developing certain consistent logistic capabilities, a convenient solution being the development of Multinational Joint Logistic Centres in the framework of the CJTF concept (Combined Joint Task Force).

Efficient commitment was assimilated to discriminatory application of force and reducing collateral damages and victims, aiming at using modern technologies (topic later developed in the Effect Based Operations concept). The need for protecting military forces and infrastructures is also based on modern technologies (research and surveillance systems, air defense systems, systems for counteracting mass destruction weapons).

Interoperability of communication is an essential requirement which assures the interconnection of the other capabilities.

In approaching all aspects of transformation, the SACT strategy aims at performing intercessions in collaboration with the allied nations and relevant partners, which refer to ACT as a "*core of transformation*" in NATO⁶³. In the long run, the transformation efforts reflect on the NATO member states. These are the ones that have to actually achieve the capabilities presented in the objectives of forces of the structures with which they contribute to the Alliance. This creates responsibilities regarding the assurance of interoperability, deployment, equipment purchasing, modernizing the process of education and training, adapting the legal system and specific regulations, development and taking part at institutionalized forms of the support given to NATO's development process.

Improvement of relationships, interactions and actual cooperation with the partners, nations and international organizations - another strategic objective of ACT - is a preliminary requirement which sets up the premises of all other developments.

Approaching the field of cooperation and partnership, we can see that NATO has created a real security network which includes partnership arrangement⁶⁴ which are based on the principle of common development of security interests: the Partnership for Peace; the Mediterranean Dialog; the Cooperation Initiative of Istanbul; contact countries (which, even though are not NATO members, share the values on which the Alliance is based and which expressed their availability to cooperate with it under different circumstances).

Each partnership has formal mechanisms which allow bilateral or multilateral consultations in the field of common interests. The materialization of these relations is performed through multiple methods, including consultations in common fora, assistance in the field of reform and defense planning, different types of training offered through NATO, in accordance with its standards, in fields like: peace support operations, weaponry control, fight against the proliferation of mass destruction weapons, environmental protection, civil-military cooperation

⁶² The initiative was developed in a manner which could also contribute to the development of ESDI - European Safety and Defense Identity, by enhancing the defense capabilities of NATO's European pillar.

⁶³ ***, ACT, *ACT Collaboration with National Transformation Entities*, at <https://transnet.act.nato.int/WISE/CollaboCat>

⁶⁴ http://www.international.gc.ca/nato-otan/partners-partenariats/index.aspx?menu_id=48&menu=R&menu=L

etc., exercises and working groups with common participation, visits at NATO's commands and facilities, contribution to the Alliance's operations in different theaters of operations, and others.

2. SUBJECT APPROACH AND STUDY METHODOLOGY – BETWEEN GEOGRAPHY AND SECURITY STUDIES

2.1. Argument

We consider that the chosen topic is of special interest, due to the fact that is in reference to an actual process and represents maximum importance for the security of the Euro-Atlantic area - NATO's transformation, in which the network of Centres of Excellence represents a more and more relevant actor.

Centres of Excellence answer specific areas of transformation, coming from the Strategic Concept directions (Collective Defence – see the COEs supporting C2, Air and Maritime Operations; nuclear defence and deterrence – JCBRN Defense COE; partnership/ cooperative security – partially covered by CIMIC COE; crisis management – CMDR COE; fight against terrorism – COE DAT; cyber defence – CCD COE; energy security – ENSEC COE; strategic communication – STRATCOM COE), providing solutions to shortfalls identified in NATO operations – e.g. counter-IED, EOD, HUMINT, Military Engineering, military medicine, military police, or arising from education and training enhancement needs – e.g. modeling and simulation.

The research activity of this study is aimed at defining – from the perspective of a common ground of more distinct scientific areas: political geography / geopolitics, institutional geography, security studies and international relationships – the significance of dynamics of NATO Centres of Excellence, starting with their effectiveness for the Alliance and continuing with the logic of political-military decisions of the Member States' involvement in this programme.

In regards with the voluntary nature of the States' participation in the Centres of Excellence, geo-political or international relationship reasons of national decisional factors show the particular security interests of them and also serves for outlining NATO's communities of interests, the degree of participation being also a relevant mark of the interest, availability, implication and cohesion of the Allied Nations.

The fact that Romania hosts a NATO Centre of Excellence (NATO HUMINT Centre of Excellence - HCOE), at the same time being involved with experts in other COEs (holding a prominent position among the Allied States which are involved with resources in these initiatives), can only be another reason in my endeavor to elucidate the mechanisms and significance of certain decisions, and also the particularities connected with their actual materialization.

Personally, as director of NATO HUMINT Centre of Excellence from Oradea, receiving its formal certification by the North-Atlantic Council in July 2010, but having started its

establishment in 2007, I can state that each step and each aspect of the process was a challenge by itself, regardless of its nature: assuring infrastructure, compliance with NATO's security norms, legal harmonization (national vs. international / NATO), staff selection, negotiation with partner states, public relations and promotion policies, ensuring the logistic support, budget and investment program, relationship with the local authorities, creating the work schedule, establishing work relationships with other national or international structures etc.

Due to equal decisional power of the Nations in COEs, through their representatives in the Steering Committees (the decisional bodies of COEs), the advantages of a Nation's participation at a Centre of Excellence are multiple, these aspects being covered later in this paper. However, I would like to highlight the impact generated by establishing an International Military Organization of this profile on the host nation and on the local community, despite of the costs naturally associated with it.

If, on a national level, hosting one or more NATO Centres of Excellence represents an international recognition of the reference field's quality, the Centre becoming an image promoter (national and of the military institution), the local spectrum of significances enriches due to different social-cultural, economic and administrative connections. Systematic awareness and approach of these can lead to the improvement of the multi-dimensional relationship between the Centre of Excellence and the local community, for the benefit of both parties.

Another important aspect which I would like to highlight is the one connected to the activity profile of a Centre of Excellence. This is based on four reference pillars: education and training, lessons learned and analysis, conceptual development and experimentation, doctrinal development and standardization. The Centres of Excellence define their own degree of activity extent (through establishment documents and decisional documents of the managing committees), each presented direction promoting additional value and searching for expressing excellence in the field, both in regards with aspects connected to training and to research-development. From this point of view, academic cooperation (both military and civil) is the only one able to offer the committed quality levels.

2.2 Working methodology

Methodologically approaching the selected topic is strongly connected to the practical experience gathered together with following the needed steps for establishing and accrediting the NATO HCOE.

Through the nature of the top position and the degree of implication, the correlation of the functional and operational conditions with the needs of NATO's development and transformation, and also the comprehensive identification of the social, cultural, economic and administrative impact on the local community, have developed in a natural logic.

This aspect required a sustained interaction with Host Nation's responsibility factors (at political and military decision levels, legal representatives, superior military echelons, administrative-logistic support, etc.), NATO representatives and also with national representatives of countries interested in taking part at the HCOE project.

Until now, by attending different NATO conferences and working groups, the permanent connection to the pulse of transformation was offered, pulse pursued by the Alliance for the purpose of optimizing their own capabilities of managing present and future security situation, with direct impact on the activity of the NATO Centres of Excellence. Besides this directing line, the basis of the paper (the stage of topic knowledge) has benefited from access to public technical information, characteristic to each of the targeted institutions.

Methodologically, the items of geography epistemology - expressed through specific conceptual support and completed with items of method, technique and means of research (Petrea, 2005) - completed the algorithm of scientific knowledge in the field of geography, connected with analytical items from the field of security studies.

Exceeding the information gathering period, starting from the information had, the scientific research activity was based, mainly, on the method of analysis and synthesis, this allowing the thoroughness of the security phenomenon, punctually approaching a series of objective and subjective marks and indicators, study of which determines aspects of understanding of the security phenomenon through geographical, social, cultural, religious, and economic conditions, and their temporal development.

Understanding the future development of security was based on the method of modeling, aimed at anticipating possible future scenarios, taking into consideration present realities, the identified vectors of change (and trends) and reaction simulations to different critical stimulus applied to these results.

Statistical analysis has proved to be relevant in configuring the relationship between NATO States and NATO Centres of Excellence, highlighting different degrees of involvement of the nations in such projects (based on political-military decisions issued from geopolitical and international relationship aspects), and also different levels of interest based on the specific topic of the Centres, aspect which can outline particular interests, also based on geopolitical criteria, specific to each nation.

The part of the paper which deals with the topic of institutional integration of the Centres of Excellence was developed both based on certain questionnaires (aiming at performing a comparative study between different levels of integration undertaken by different Centres, nationally), and also based on processing information received from other institutional sources (databases of local public institutions, dialog with the representatives of the local administration, of certain economical institutions or belonging to the civil society etc.).

All these endeavors were conjugated in the integrated study applied to the NATO HUMINT Centre of Excellence from Oradea, in the attempt to decode the entire set of phenomena and processes connected to the relationship between the institution and the local environment, and also to highlight the relevance of this relationship from the perspective of junction areas between human geography and security studies.

Starting from all these aspects, the present paper represents a first step towards an approach in terms of institutional development geography, which is required by NATO's transformation process in the area of Centres of Excellence. Just like economical geography has oriented its attention towards economic institutions for the purpose of determining the causal connections between the field of geography and performance, substantiation of decisions, culture of the organization, placing them in the spectrum of social institutions on which the economic activity depends on and based on which it is drafted up (Ron, 2002), I consider that political geography and human geography have to pay attention to the field of institutions relevant in political and security decisions, both national and international, from the governmental and private environment, and also the impact created by these - besides functional objectives - in the communities.

In this meaning, starting from the idea that security has seen major developments, its conceptual relevance oscillating between the individual / community (human security) level and the economic and social dimensions, exacerbated by the phenomenon of globalization, national security receiving a powerful pan-state expression. Thus, security becomes a market on its own,

where requirement and offer entwine with criteria specific to human geography, political geography, geopolitics and geostrategy.

Determining private and institutional government networks, their gaps and overlapping, monopole, competition or action complementarity, connected to fragile areas - or, conversely, security stability poles - are just a few dimensions, approach of which, based on geography, have a relevant importance.

The state's monopole in the field of specialized security institutions is still a reality, but just as is the emergency of certain new actors, from the private field, fact which shows the new needs in a more institutional field of security - starting from think-tanks (as opinion shapers, counseling factors, influence and even manipulation), military research and industry and ending with private organizations, covering a large spectrum of fields- from intelligence to physical security.

Their essence is indissolubly connected to the tutelary forum, but also the host territory system, being materialized in a set of values which define them as separate entities (Gertler, 2004). Practically, we can state that an IT Centre from UK is different from a similar Centre from Japan, just like a city hall from Bihor County is different from the similar administrative organism from Tulcea. In these differences we can find the way in which the definitive character of a territorial system is reproduced on the organizational level, and this shows the relevance of geography in the study of these types of organizations.

This aspect is also important for the political-military field, where decisions are based on a series of criteria in which we can find certain indicators which are specific to human geography. For NATO, promoting its own security culture is based on the available strategic options, options which aim - besides others - also at institutional performance. Thus, it becomes obvious that it is determined by the mental matrix of the organization, being tributary to the congruence and complementarity between NATO's institutional culture, national military organization tradition, and also the rigors of institutional thoroughness (in case of Centres of Excellence, the decisional forum consists of a Steering Committee made up of representatives of participating nations).

NATO's expansion also represents a school of "becoming", allowing the replication of certain functional models and an export of good institutional practices (e.g. setting an International Military Organization, from an occidental perspective). Mainly ex-communist East European countries have benefited from this contribution, in their effort to detach from Russia's area of influence and, afterwards, in the process of joining the Alliance and affirmation in it. Thus, in the virtue of this pandeism of security (Negut, 2008), the evolution of the traditional "mental area" took place (Cocean, 2005, 62-75) towards an assimilation and ordering of the perception of security, associated with the guarantees offered by belonging to a strong military bloc and by the perspective of evolution in the new framework.

In the common spectrum of the threats recognized by NATO, the Allied States - according to their geographical position, historical development and national interests - prioritize response abilities and aim at predilect development of those corresponding to the new requirements. This aspect is also visible in the development of NATO Centres of Excellence, where the states' options do not depend only on the expertise recognized in one field, but are connected to the national security interests projected on the level of the Alliance, as an ensign of their legitimacy. I would like to mention here the case of Turkey, where the NATO Centre of Excellence for Defense against Terrorism operates (starting from the effort for managing the activities of the Kurdistan Labor Party - PKK, organization listed as being terrorist by Turkey, but also by USA, EU and NATO), Estonia, the host nation for NATO Centre of Excellence for

Cooperation and Defense against Cybernetic Attacks, which came as a solution to prevent/counter this type of threat, experimented in 2007 etc.

Of course, these initiatives have their projection in larger geographical areas; states participating at the Centres of Excellence openly manifest their political and military interest in contributing and benefiting from the results of the common effort.

Starting from the level of strategic interest and decision, the paper also approaches the integration perspective of these organizations in local communities, functional connections - formal and informal - which are established, their significance and impact, translated in a series of aspects specific to analysis of institutional dynamic, which are taken into account by human geography.

2.3 NATO Centres of Excellence –a shared approach

In the efforts for defining the reference field of human geography (Negut, 2011), we have references with different space and time evolution. Besides the already established "political geography", taxonomic expressions like "*geography of conflicts*" (Constachie, 2004, 281), "*geography of major risks*" (Debie, 1995, 2-9) or "*military geography*" (Dionisa, 1977, 96-97), we would like to start a debate on the topic of "*geographic security*", in its institutionalized dimension.

We can see the bivalent connection between the word "security" (as a status characterizing human community and its territorial system, on different scales of reference) and the institutionalized dimension of the actors of the security area –State's institutions, pan-state/international governmental security organizations, private force entities (terrorist organizations, paramilitary groups, organized crime organizations etc.), actors being in a constant evolution in the matrix of spatial balances and unbalances of power (and the consequences of the spatial distribution of the security / insecurity status). This relationship gives us the right to take into consideration the factual material of the evolution of security international organizations, through their political-military character and in the virtue of consensus - absolute or relative - of the geopolitical and geostrategic interests of the constitutive states.

Starting from the model of area organization found in the theories of more authors (Negut, 2011; Ianos, 2000; Beucher and Reghezza, 2005), we can see a series of congruencies in the logic of the distribution of structural elements of space, in a parallel of the functional dimension and of the security dimension. The projection of the organization of security in territory determines the transformation process of the relevant organizations in the spectrum of power - in case of this paper, the North-Atlantic Alliance.

Transformation, as a derivative process of adaptation to the new challenges of security, finds its expression not only in the quantitative and qualitative development of the needed capabilities, but also in geostrategic options. From this point of view, the network of NATO Centres of Excellence creates a model of institutional representation of certain specific interests, as we will show in the present paper.

NATO's security area, characterized by nations joining a set of common values in regards with preserving and promoting own security interests, exceeds the abstract level; this is defined by a (relative) homogeneity of the approach to specific problems, and also by the according representation of solutions in the institutional level. The network of NATO Centres of Excellence is part of what defines this area of security; a systematic approach positions the Centres of Excellence in the place of distinct structures, with own priorities and functions in the institutional

gearing of the North-Atlantic system, but also in the spectrum on institutions relevant in the field of international security, with larger horizons (aiming, a priori, to a global level of recognition).

From the perspective of the science of geography, a high level of interest is represented by studying the relationship between the system of NATO Centres of Excellence and the host territory systems (also taking into account a projection of the Centres on the level of security area), whilst security studies are based on aspects connected to the functional features of the network as a sub-system in NATO, with reference to geopolitical effects (in accordance with branch capacities and capabilities specific to each item of the structure and with specific connections with host nations and participating states).

The concepts specific to the theory of systems, as presented by Prof. Silviu Negut - *"items, relationships, statuses, information, feed-back, [...] structure, behavior-dynamics"* (Negut, 2011, 193), defines the approach framework of the aspects previously presented, from a multi-disciplinary perspective, contributing to the shaping of the importance and need of an approach like this.

Through their physical presence (which lead to a status change of the territorial system and creates functional relationships with other organizations of the formal and informal institutional landscape) and through the offered products and services (positioning indicators in the systemic set of the network), the Centres of Excellence become a study topic both as a set (network) and as individual, particular topics. The present paper is developed based on this logic, starting from the cause factor - need for transformation in NATO' institutional and capabilities spectrum (as a requirement for adaptation and efficiency of the security organization), presenting items contributing to this process and continuing with the analysis of the enhancement decisions of this framework - establishment of NATO Centres of Excellence.



Picture 1: NATO Centre of Excellence from Oradea; access gate from Armatei Române Street

Reaching the case study represented by NATO HUMINT Centre of Excellence from Oradea, I aimed at defining the status variables, functional and relational processes, interactions and potential offered by the host territorial system. Starting from the territorial reality's character of continuous "*spatial and qualitative restructuring*" (Ianos, 2000, 21), I highlighted the contribution and importance of the Centre of Excellence from Oradea to the local community.

In this meaning, I would like to underline, besides the prestige given by its uniqueness as an international military organization (on a national level - as an organizational typology, and on an international level - as a Centre of development and training in the specific field of activity), the consolidation of the cultural and educational space of that area of the city (Universităţii Street - Armatei Române Street, with the University of Oradea, the County Library, Military Museum, the regional Museum "Țării Crisurilor", a series of other education facilities, etc.)⁶⁵ (Image 1), and the increase of residents and foreign visitors (with implications in the local economy and tourism, but also in shaping the development requirements of the field of education, medical assistance etc.)

In regards with the relationship of the Centre of Excellence with the host city, through the perspective of prospective geography, the study represented by cities - as an "*eloquent example of area conquered and enhanced by humans*" (Negut, 2011, 265) also includes their development from the institutional perspective, and also the conditionality of this process over the physiognomy of the urban area. The influence of institutional development on all other factors - economic, social, natural etc. - positions their analysis on top of the endeavours for studying the territorial evolution of cities.

Besides the administrative organizational spectrum, the existence of prestigious national and international institutions, of certain unique structures in the framework of certain higher organizational structures, makes that city to be known as - in specialized environments, but also outside of these - "the city where ... [*the subject institution – e.g. a COE*] can be found". I would like to give Brussels as an example, where top decisional elements of EU and NATO can be found, Hague (Netherlands) - known for the International Court of Justice, Oberammergau (Germany) - known not only as a winter sports resort, but also a host of the NATO School. Certainly, in NATO, Oradea represents *the city of NATO HUMINT Centre of Excellence*. Starting from this recognition, the city has to show also other qualities to foreign visitors, and the local authorities to exploit this opportunity with maximum output.

As a determining vector for the main changes in the logic of daily life, globalization is recognized by Prof. S. Negut as being "*an amplifying factor of human geography studies*" (Negut, 2011, 272). This process has a special relevance and resonance in the case of security organizations, and NATO is not an exception from this rule. Besides the global recognition of an almost unique financial and economic system, of the global framework for scientific and technological development, of the inter-connection and inter-dependence of infrastructure items, the enhancement of pan-state inter-institutional connections etc., phenomenon translated in opportunities (Stiglitz, 2008) - but also disadvantages, internalized in the human psychic as a compromise with a balance not yet determined, we can see the effects of globalization on the security environment.

The international threats represented by terrorism, organized crime, cybernetic attacks, failed states etc. also require an internationally coordinated reply. NATO, through its institutional system and abilities, aims at managing all these situations, in a manner which can

⁶⁵ On a local network level, there is also collaboration with the Sub-Officer School for Border Police, Agora University etc.

satisfy the requirements stated by the Strategic Concept, and also to expectations of the Allied and Partner Nations. Any analysis dedicated to globalization and its effects, through human geography, has to also include the security side of this phenomenon. The present paper contributes, in this meaning, to the understanding of the institutional logic and support created by the specific realities taken into consideration.

On a national level, the interest in the study of political geography from the perspective of belonging to NATO, has to complete the previous stages (Bodocan, 1997; Negut and collab., 2004; Ilies, 2010) and to indispensably include the analysis of recent effects of Romania's political-military decisions in this relationship, through the evolutions specific to the global picture of security. Establishing the NATO HUMINT Centre of Excellence in Oradea, placing certain items of the anti-missile shield in Romania, opening certain military bases and national training facilities for the NATO partners etc., have an effect not only on security, but also represent a multi-dimensional interest, including approaches specific to human geography.

Research in trans-border cooperation, in its traditional approach (Popa, 2006; Ilieș, 2003; Ilieș, 2010), can have interesting developments through the exploitation of a very important resource: dynamics of power relationships (military) in the border areas. Part of this, military cooperation has seen events with deep significances, connected to the pulse of political and social events, characteristic to each border area. Beyond focusing military efforts towards the Eastern border of NATO, together with Romania joining the North-Atlantic Alliance (fact which lead to a massive dismantlement of previous barracks from the Western part of the country, their role being redirected towards the support of local communities) and focusing exclusively on the North-Western part of the country, we would like to note the existence of mix-military units in the barracks of Arad and Satu Mare, as an expression of the regional cooperation in the field of security⁶⁶.

The Romanian-Hungarian Mix-Regiment for Maintaining Peace is the first mix regiment structure (made up of soldiers of two nations: Romanian and Hungarian) from the world. Has been established on the 20th of March 1998, having two modules (Hungarian and Romanian) with equal manpower, constitutive part of two infantry regiments⁶⁷, which deal with peace maintaining and humanitarian missions under the mark of UN and OSCE, led by NATO and EU. The unit's commandment is completed in turns, and the soldiers' training is modularly performed, both in residence barracks and, jointly and alternatively, on the territory of each state, in the framework of complex applications and exercises⁶⁸.

In Satu-Mare, the "Tisa" regiment 53 Engineers (subordinated to Regiment 10 Engineers) was established on the 18th of January 2002, as a result of the development of the cooperation relationships and dialog in the Partnership for Peace between the states of the area, based on the agreement signed by the Ministry of National Defense from Romania, Ministry of Home Defense of the Republic of Hungary, Ministry of National Defense of Slovakia and the Ministry of National Defense from Ukraine.

Regiment 52 Engineers, as a regional initiative unit, has attended starting with the year of its establishment until present time, with designated soldiers or with the entire "TISA" Engineers

⁶⁶ Of course, cooperation in this field is not limited only to the military field (maybe this being the weakest representative from this perspective, other safety institutions benefiting from the advantages of institutional cooperation specific to Romania belonging to EU).

⁶⁷ The Romanian module - part of "Colonel Radu Golescu" Regiment 191 Infantry from Arad; the Hungarian module - part of "Bercseny Miklos" Regiment 5/3 from Hodmezovasarhely

⁶⁸<http://www.clujarm.ro/>

Multinational Romanian Regiment at 24 missions on the territory of other states or in the country, with the participation of the partners of initiative.⁶⁹

These were joined in 2010 by the NATO HUMINT Centre of Excellence from Oradea, international military organization affiliate of NATO, at present time, nine countries being part of it: Romania, Czech Republic, Hungary, Slovakia, Slovenia, Poland, Greece, Turkey, and the USA. In the present configuration, besides the affiliation with NATO, the Centre represents a benchmark of regional cooperation in this area of Europe, and the analysis from this perspective is able to increase the knowledge specific to human geography.

⁶⁹<http://www.bg10ge.forter.ro/istoric%20batalionul%2052ge.html>

3. THE TRANSFORMATION NETWORK AND NATO CENTRES OF EXCELLENCE

3.1 NATO Transformation Network

The transformation of NATO's defense capabilities follows an eloquent development image, marking multi-dimensional evolutions which come as an answer to the specific adaptation requirements to a continuously changing environment, which requires forecast, comprehensibility and flexibility as main features of organizational culture, both as a process, and as an action result⁷⁰.

The strategic environment, risks and challenges of the future, the nature of operations and conflicts, the effects of new technologies, all determine the future thinking and approach methods of NATO, with deep implications on the level of force, concepts and capabilities transformation, with effect on all force structures: Land Forces, Air Forces, Navy Forces and Special Forces, but also on strategic and operational command structures.

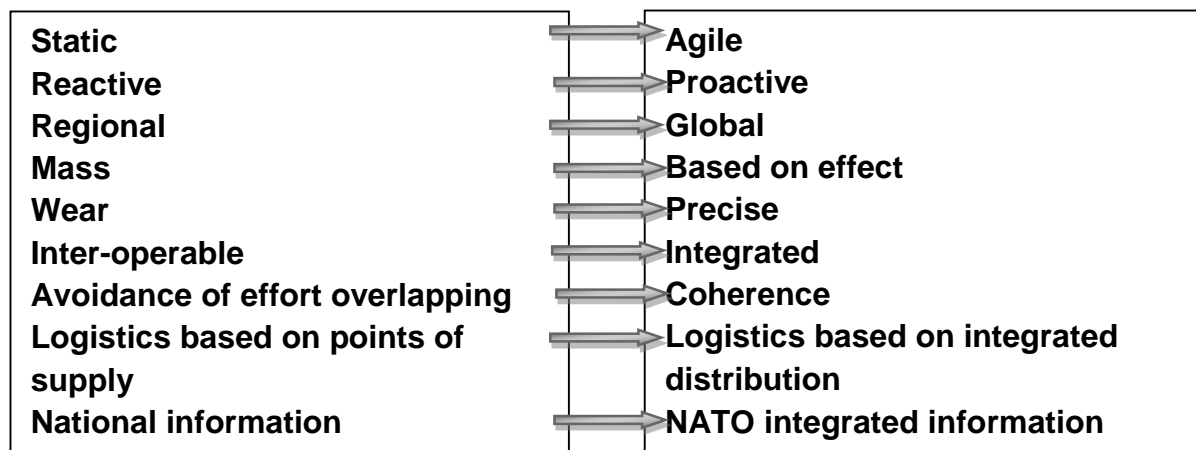


Figure 4 Qualitative requirements regarding the evolution of NATO's structures and capabilities in the process of transformation (ACT presentation - 2011)

A diagram regarding the qualitative aspects of the transformation requirements in represented in figure 4, this being present in the transformation agenda of all NATO structures, in accordance with specific abilities.

⁷⁰<http://managementconsultingcourses.com/Lesson35OrganisationalCulture.pdf>

Besides the dedicated effort of the leading items of these structures, a particular contribution in regards with the qualitative aspects of NATO's transformation comes from an area which can be interpreted as having a borderline relevance –the NATO Transformation Network.

We consider that its study, both from the perspective of the support given to the transformation process of the Alliance, and also in a geopolitical approach (as an analytical endeavour for the particular implication of the NATO states in field of strategic interest and in certain relational combinations) can lead to a series of particular conclusions.

3.1.1 NATO Transformation Network - towards a new vision of organizational transformation

Transformation means change, and this manifests itself in any system, with relevance in time and space, reaching qualitative and quantitative references, setting the outputs and inputs, the added value, the difference between intention and product, an entire suite of auto-generating causalities and cycles for the transformation of subsystems and supra-systems.

The need for change is directly connected to the need for performance - in case of security organizations meaning performance as a preservation of the state of peace, effective management of threats and risks and creating a climate of cooperation with the neighboring areas, all these subsumed to the holistic requirements of human security and to creating the conditions needed for sustainable development.

The management of change on an organizational level, as a structured approach of the transition efforts towards an aimed status, was defined by J. Hiatt as representing the processes, tools and techniques for managing the human factor - social infrastructure of the organization, eluding the technological meaning of transformation. The model of organizational congruence of Nadler and Tushman, which intercedes transformation, as a status, between the inter-connected flows of input and output through feed-back, approaches four fields of reference which are relevant in this process: activity and tasks, systems (formal and informal organization) and the human factor (Figure 5) (Wyman, 2003).

In this model, inputs are represented by: the environment, resources of the organization and its culture (history), transformation representing the dynamic filtration, through the intermediary categories, of the inputs, towards the category of outputs - with representation on the level of system, group and even the individual.

Lessem and Schieffer approach the phenomenon in a wider manner, identifying four basic pillars of the management of transformation: environment, organizational culture, scientific development and management of transformation (as an administrative process of change) (Lessem and Schieffer, 2009).

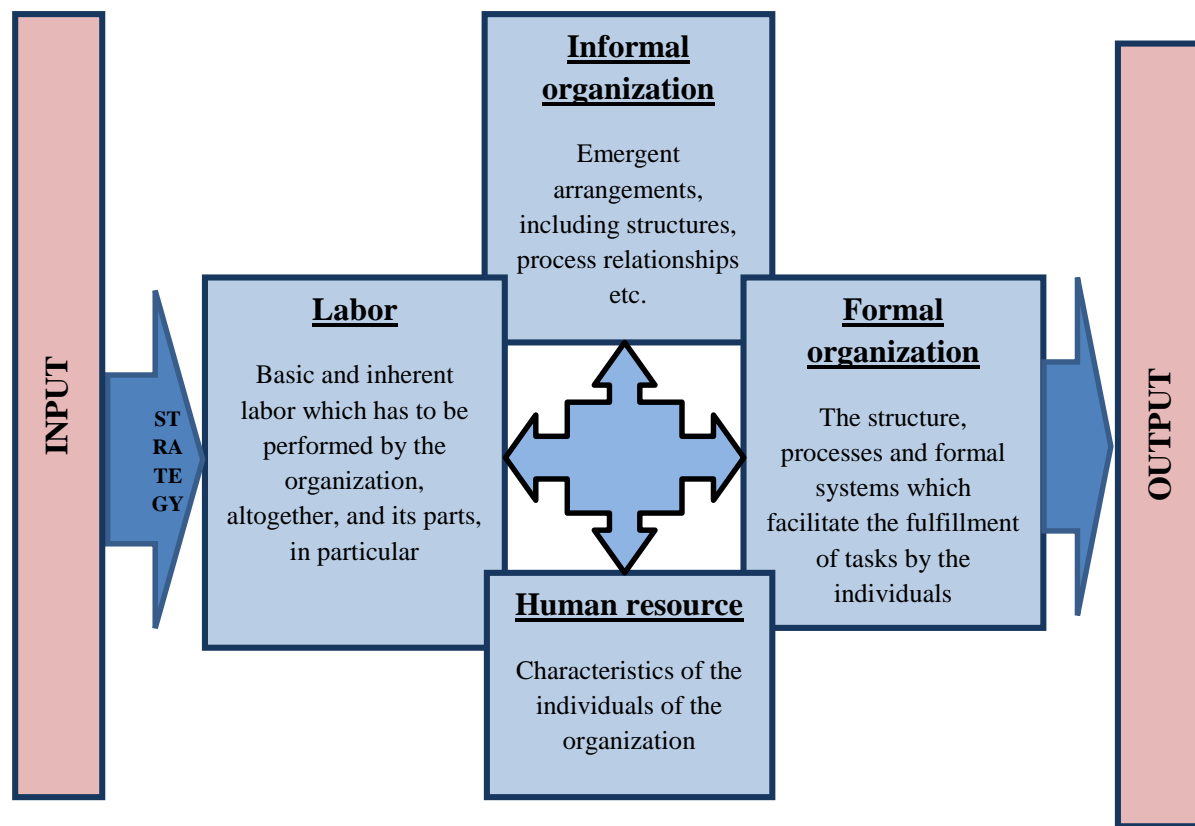


Figure 5Key components of the organization represented in the dynamics of transformation (Wyman, 2003)

Returning to Nadler, in the matrix of organizational changes created by him (Figure 6), the categories of change are overlapping in connection to the temporal references and the impact of the effect (content), having four typologies of transformation in the organizational culture and organizational system: harmonization, reorientation, adaptation and re-conceiving.

TYPES OF CHANGE	AMELIORATIVE	STRATEGIC
REACTIVE	Harmonization	Reorientation
ANTICIPATED	Adaptation	Re-conceiving

Figure 6Nadler's matrix of organizational changes (Marinescu)

Assessing the decisions of the organization's transformation plans in a manner at least according to the criteria of the matrix of changes, places us in the correct terminology needed for describing certain complex processes.

Thus, through **harmonization** we can adjust certain aspects which allow us to align to perceived developments of internal and external stimuli (on a strategic level, **reorientation** representing the global impact, on the organizational level, of these types of decisions), **adaptation** allowing the organization to react in the meaning of anticipative encounter of certain undesired effects created by these evolutions. **Re-conceiving** of the organization (or of certain components of it) represents a strategic decision which aims radical changes focused on its survival or re-potentiating, targeting different levels of representation through the involved

factors and activates cultural dynamics, trans-cultural learning, scientific research and innovation, marketing of transformation, human resource, management of information, sustainable development, organizational structures and systems etc.

By quantifying the impact and level of reference of the analytical endeavor, we can approach **transformation** as a strategic process, connected to the macro-levels of the organization, aiming the support for obtaining defined strategies and objectives and **change** as a phenomenon focused on the micro-levels of commitment and on the interested structures⁷¹. Through transformation we can obtain the reformation of the internal operation methods and of the principles of relating to the interlocutors, whilst change gives us the perspective of the actual support needed for the wide process of transformation.

In an approach specific to the military environment, transformation is defined by the US Department of Defense as *"a process which models the changing nature of military competition and cooperation through new combinations of concepts, capabilities, people and organizations, which exploits the advantages and assures protection against vulnerabilities [...], for the purpose of supporting the strategic [...] position, which contributes to consolidating peace and stability"* (Garstka, 2005).

As a consequence, the need for military transformation can be examined from the perspective of several imperatives, which are connected to the security organization's equation in its relationship with the security environment: strategy (vision, policies, concept, doctrine, procedures), technology (scientific research, innovation), threats (external vs. internal, vulnerabilities, asymmetry) and risk management (risk assessment, control measures).

In a simplified sense (but not necessarily simplistic), P. Davis thinks that military transformation has to be understood as subsuming *"deep changes"* in the military field. In this meaning, based on the assessment of the American army's history of transformation, the researcher presents a series of specific fields representing requirements of the need for change, subsumed to certain reference categories considered as being essential: strategy, forces and the conception of their usage, discharging from the equation of planning obsolete challenges, accounting of the system's capabilities, doctrines and operations, acquisition policies (modernization and iteration) (Davis).

The US strategy for military transformation (which represented a starting point for the similar process initiated in the North-Atlantic Alliance) is based on four reference pillars:⁷²

- enhancing joint operations;
- exploiting the advantages of *intelligence*;
- conceptual development and experimenting;
- development of transformational abilities.

The algorithm of transformation as a source of power is presented in Figure 7, correlating its operational purposes with the flow of processes and resources which represent the basis of an endeavor aimed at supporting the advantage in a competitive environment.

⁷¹http://www.umtha.com/change_management.html

⁷² ***, Office of the Secretary of Defense, *Military transformation – a strategic approach*, (cleared for public release by Department of Defense Directorate for Freedom of Information and Security Review, 03-S-1851), 1000 Defense Pentagon, Washington, DC 20301-1000, published in 2003, www.oft.osd.mil , pp. 20-27

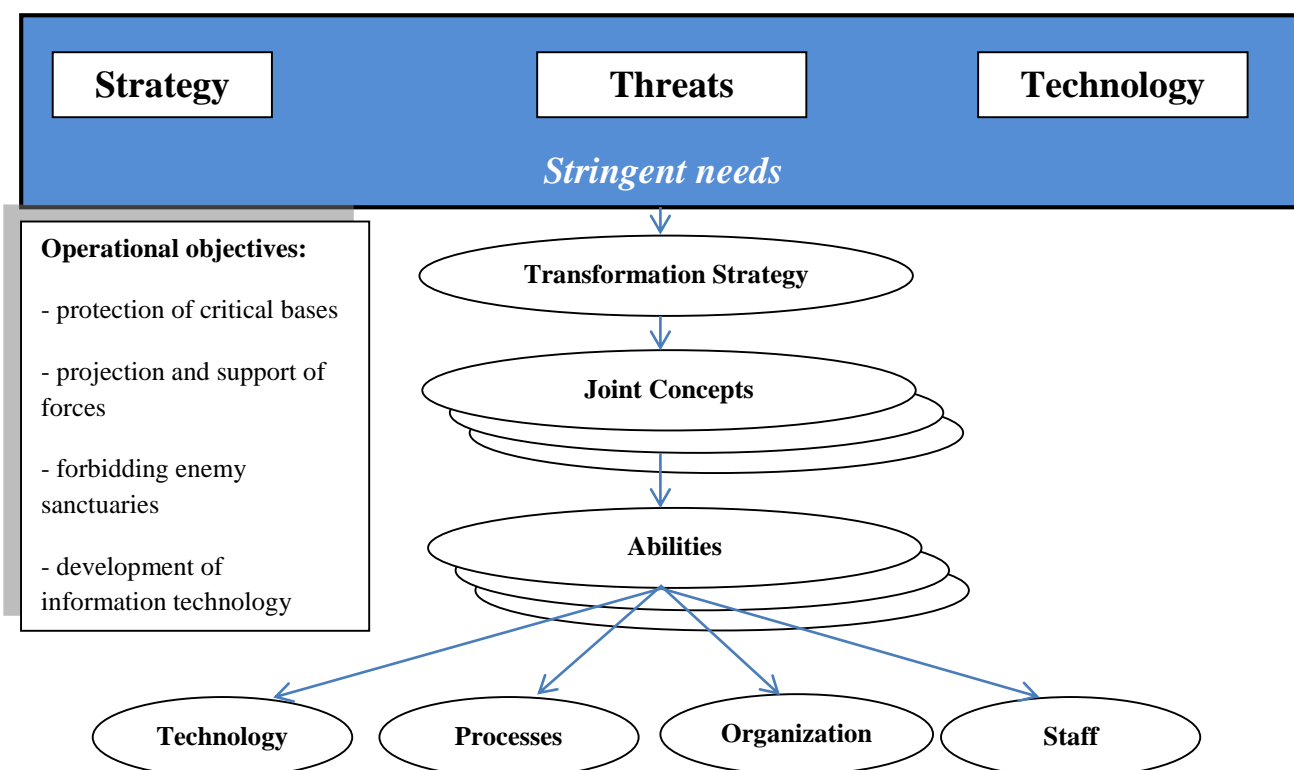


Figure 7 The process of military transformation in accordance with the US doctrine⁷³

In MC 324/1, transformation is defined, in the North-Atlantic Alliance, as a continuous and proactive process of development and integration of concepts, doctrines, innovative abilities, for the purpose of improving efficiency and interoperability in NATO and Partner Forces, as needed.⁷⁴ Taking advantage of a generous approach, NATO's model of transformation is based on promoting the improvement of the needed abilities through the support of learned lessons, innovative thinking, process of education and training, and also through the support of adequate materiel.

In this meaning, the ex-ACT European representative, the Belgian General Frank Hye, highlighted (in a speech of 2005, during the full process of transformation initiated at the 2002 Prague Summit) a series of fields which require the focus of the Allied Nations (Hye, 2005, 2):

- *development of an iterative, constant process of transformation, with a spiral geometrical evolution;*
- *transformation of mentality through intellectual and cultural change;*
- *stimulation of innovation;*
- *multilateral change of the organization, policies, concepts, doctrines, processes and training;*
- *orientation of the structures towards the product (end corresponding to the purpose);*
- *planning long-term objectives;*
- *focusing the efforts on actions based on effects, as beneficiaries of network systems;*

⁷³ ***, Office of the Secretary of Defense, *Military transformation – a strategic approach*, (cleared for public release by Department of Defense Directorate for Freedom of Information and Security Review, 03-S-1851), 1000 Defense Pentagon, Washington, DC 20301-1000, www.oft.osd.mil, p. 11

⁷⁴ ***, MC 324/1, The Military Command Structure, 7 May 2004

- *catalyzing the forces and abilities of the allied nations in the deployable command and headquarters structures and NATO Response Force.*

NATO Response Force represents the quintessence of the Alliance's power projection, characterized by flexibility, deployability, interoperability, abilities of projection and level of training, also representing an adequate environment for experimental phases specific to conceptual and doctrinal transformation processes.

Starting from these aspects, ACT approaches transformation from the perspective of five fields of change:

- **Strategic concepts, Policies and Interoperability** (transposed in concepts of force interoperability, development and implementation of policies, techniques, tactics and procedures);
- **Research and Technologies in the field of Joint and Combined Future Capabilities** (which undertakes the coordination of research and development initiatives of NATO technologies);
- **Experimentation, Exercises and Joint Assessment** (with importance in synchronizing and assessing the experiments in the field of joint fight, integration of abilities, experimenting techniques, tactics and procedures);
- **Joint Training and Education** (aiming at specializing leaders at all levels, assuring the control of NATO entities with attributions in the field of education and training, developing the coordinates of standardization);
- **Planning Defense / Planning and Implementing of Requirements and Capabilities** (identifying the needed capabilities and implementing solutions through defense planning).

Thus, these fields train people (leadership, education, training), processes (translated as concepts, doctrines, techniques, tactics and procedures, standards), type of organization (organigram of command structures, organizing force structures), technologies (material resources, bases, research and innovation abilities etc.), in a complex of endeavors which aim, as a result, at intra-institutional coherence (as a gradual phenomenological event –Figure 8) and the message of extra-institutional stability and performance.

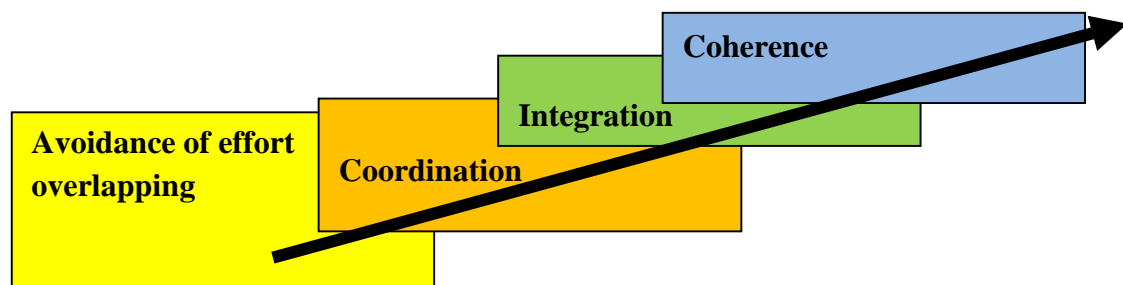


Figure 8 Steps on intra-institutional performance

The framework of NATO transformation aims at creating the attributes which allow the forces of the Alliance to have decisional superiority in front of the opponent, to be able to integrate the capabilities needed for creating coherent effects and to deploy and support expeditionary forces which can defend the security interests of the organization.

As we have shown in a previous part of the paper, ACT represents the force agent for change, leading the process of continuous improvement of the Alliance's capabilities for the

purpose of supporting its global security interests. In this meaning, the above-mentioned fields of transformation become priorities approached in an institutional manner, based on certain rigorous plans, which records the acute internal and external stimuli, potentates the foreseen efforts in regards with the evolution of the security environment and the emergency of risk categories, budget and actively support research-development plans and projects, aim at the objectives of standardization and interoperability, and also at reaching multidimensional performance.

Essentially, transformation - understood as an evolution of current abilities towards the aspects needed for future operation, in an efficient and economical manner - aims at creating: improved capabilities (the ability to accomplish the missions given by the Alliance), increased interoperability (the ability of 28 nations to operate jointly), and consolidating common values (NATO operated through the agreement of the members, based on shared values).⁷⁵

NATO Transformation Network represents, from this point of view, beside the framework given by the command structures established over time, also an extension of the effort to manage NATO's transformation phenomenon, based on the opportunities given by the voluntary and/or co-interested presence, under different shapes and participating formulas, of NATO's Nations or Partners, and also of a series of governmental and non-governmental international organizations, academic and scientific institutions, and even the public (in the field of interaction given by the formula of strategic communication).

This connection represents an original model of complementation of resources needed for the continuous process of transformation, of which, NATO, as an organization, benefits completely. Thus, significant transfers of expertise, good practices, learned lessons, technological resources and know-how are performed, which represent an addition of values, compliant with the Alliance's norms.

3.1.2. Structural and functional parameters of the Transformation Network

Based on the strategic view jointly promoted by the two strategic headquarters of NATO, which foreshadows the environment of security where the Alliance shall operate and establish the coordinates of the planning and conduct of operations, we practically get to the point of underlining the necessary capabilities to this end on a conceptual plan and at level of forces, as they are represented in Figure 9.

CAPABILITIES			
PURPOSES OF TRANSFORMATION	OBTAINING COHERENT EFFECTS	OBTAINING DECISIONAL SUPERIORITY	OBTAINING DEPLOYMENT AND JOINT SUSTAINABILITY
OBJECTIVES OF TRANSFORMATION	EFFECTIVE EMPLOYMENT	INFORMATION SUPERIORITY	EXPEDITIONARY OPERATIONS
	JOINT OPERATION	NETWORK-BASED CAPABILITIES	INTEGRATED LOGISTICS
	IMPROVED CIMIC		

Figure 9 Transformation in NATO and development of Force Capabilities (Hye, 2005)

⁷⁵http://www.facebook.com/NATO.ACT?v=app_4949752878

The achievement of these objectives is made by the coordinated effort of the responsible structures and of gainful networks that they established in time, during the assumed actions of development and concept experimentation, update of doctrines and procedures, implementation of scientific and technological research projects, defense planning, staff's education and training – as functional fields of the change.

We shall not insist on the ACT organizational chart as a structural support of the field-specific tasks. But, related to the purpose of the paper, we consider it is necessary to reveal the constituent elements and the basic features that define the NATO Transformation Network.

The website of NATO Transformation Network⁷⁶ posts in a suggestive relational diagram (Figure 10), the elements of the network which may be organized as follows:

Support structures: Centres of Excellence, Allied Nations and Partners, other entities (non-NATO states/partners, international governmental and non-governmental organizations, academic environment, research environment, media, industry and others);

Processes/actions: transformation areas (as conceptual representation and a doctrinal and technological support for the directions in order to develop the targeted capabilities), specific events (working groups, workshops, conferences, seminars, round table meetings), institutionalized products (lessons learned, good practices), programs of work of the support structures (mainly concerning the anticipation of the applications for support made by NATO structures), the network's library (that provides documentary references for the support of the processes related to the transformation and ensures information indicators in a wide range of interests).

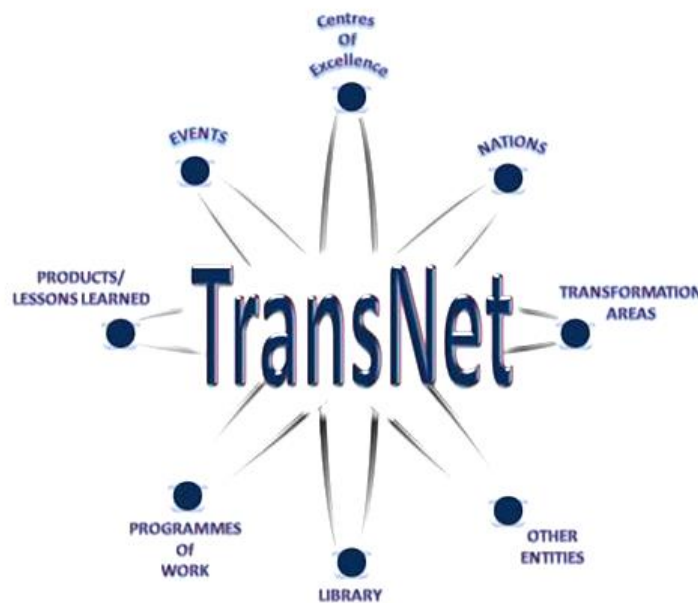


Figure 10 NATO Transformation Network (2012)⁷⁷

ACT developed particular relationship frameworks with the support structures of the transformation. Hence, the relationship with the NATO Centres of Excellence is ensured by the

⁷⁶<https://transnet.act.nato.int/WISE/Transforma0>; it is important to point out that only a part of the documents is available to the general public, the web page being completely populated for the registered users

⁷⁷<https://transnet.act.nato.int/WISE>

Transformation Network Branch, the relation with the Nations being detailed in the Collaboration Catalogue of ACT with the National Transformation Entities, while the academic environment and the security industry relates with ACT under the terms developed by the Framework for Collaborative Interaction.

The Collaboration Catalogue of ACT with the National Transformation Entities⁷⁸ was developed at the initiative of the ACT commander at that time, General Stéphane Abrial. Based on the intention and the new vision expressed by him by means of the SACT Strategic Plan regarding the mission, the focus areas and planning guidelines of the headquarter, it resulted the necessity to interconnect the national efforts in transformation, especially in the fields of developing the capabilities and the training.

The Transformation Network is thus used for the coordination of all (national) factors involved/interested, ACT operating as a transformational node meant to facilitate debates of ideas and to lead to the elaboration of some quality products (shaping already projects on topics such as: security of the common global space, role of the small armies and differentiated specialization within the Alliance, the concept of work with the indigenous security forces, restructuring the control elements of NATO, and others).

The Collaboration Catalogue represents an instrument supporting, to this end, the creation of the necessary conditions of imposing ACT as a catalyst and contributor in the transformation process within the Alliance, the document (especially by web interface) promoting the collaboration opportunities provided by ACT to the nations, facilitating the inter-linking, coordinating the innovation and aiming to implement the improvements brought to the existing capabilities.

In what concerns the Framework for Collaborative Interaction⁷⁹, its purpose is to facilitate the actions of non-commercial cooperation between ACT and the industry (security industry and not only that), respectively the academic environment.

This framework was shaped as a necessity imposed by the responsibility of ACT in what concerns the identification and the promotion of developing the essential capabilities necessary to counteract the challenges specific to the future operational environment, a requirement implying “conceptual exploration, promotion of the doctrinal development, development of experiments and support of the processes of identification and purchase of new technologies by the interaction with agencies/commissions, as applicable, for the purpose of determining and ensuring an improved level of interoperability, standardization and capabilities, transformed from a qualitative point of view”⁸⁰.

This link ensures the NATO access to the fields of knowledge and experience accumulated of agencies/undertakings/academic and research environment with a direct relevance in what concerns the efforts of development of the capabilities of which ACT is responsible, in a collaborative way, mutually advantageous.

⁷⁸ ***, ACT, Web page - *Collaboration Catalogue* – Master file – NATO Unclassified version suitable for TRANSNET, August 2010, in <https://transnet.act.nato.int/WISE/CollaboCat/Transforma>

⁷⁹ Framework for Collaborative Interaction (FFCI), in <https://transnet.act.nato.int/WISE/FFCI>

⁸⁰ *Ibidem*

3.2. Allied Command Transformation and the NATO Transformation Network. Control and coordination considerations

Lined up to the objectives and priorities set by the Alliance, the ACT mission, by its commitment to the transformation process, implies an essential component of networking and coordination of the efforts made by the institutionalized structures and systems, belonging or relating with the organization and involved in different stages of the phenomenon.

First of all, ACT provides the conceptual framework of the operations and defines the modality of approach and the capacities necessary for the future actions in order to meet the need of making use of some new operational concepts (a process including a series of stages and defining approaches – assessment of their value, doctrinal development, scientific research, technical experimentation and development).

All these claim access to financial resources, technological, technical and praxeological knowledge meant to support and promote qualitative and quantitative aspects of the transformation process, pursuing objectives that co-interest the allied nations and the NATO partners, but also the security environment as a whole.

3.2.1. The Allied Command Transformation – interface between NATO and the Transformation Network

The current organizational and relational structure of ACT is relevant regarding the practical modality of achieving the objectives set.

The ACT structural elements and the components of military staff correspond to the functional areas of the needs of transformation, ensuring the framework necessary for the development of concepts, policies, doctrines and procedures, promoting the good practices, the processing of the lessons learnt, of the analysis, assessment and experimentation, of scientific research, innovation and technical and technology evolution. At the same time, under the patronage of ACT, the militaries of the Allied and Partner Countries benefit from services of education and training that pursue the objectives of interoperability and standardization meant to serve the goals of force efficiency and of development and transformation of national capabilities, for the purpose of ensuring performing contributions to the joint effort in the field of security.

Still, to the end of rendering its activity more effective and making proof of the resilience necessary to an organization promoting the change as a driving force of the adjustment and evolution, ACT undergone a full process of reform, being mainly aimed to improve the flows of information, the component of command, control, coordination and relations of the headquarter with the NATO member states and partners from all field, of the organizational transparency and its orientation towards “products” which serve the general purpose and the objectives proposed.

Following the necessary principles of taxonomy, the ACT products may be grouped as serving five main action directions:

- *Transformation of the Allied Forces* (by the management of the transformation process at level of NATO and the assistance provided to the national efforts to this end);
- *Development of the Force Capabilities* (dissemination of the good practices from the Allied Nations, creation of the premises necessary to interoperability, creation of new capabilities by processes of experimentation and conceptual and technical development);

- *Supporting the NATO operations and missions* (by preparing/instructing the deployable elements of military staff – on specialty, but also on joint directions); providing training packages adjusted to the needs of force elements; supporting the urgent operational requirements and ensuring their compliance with the long-term developments of capabilities;
- *Managing the process of the lessons learned* (ensuring the collection of observations and lessons identified, and supporting the transition from the stage of problem to the one of solution);
- *Strategic employment* (by promoting and supporting the vision of the command element concerning the ACT involvement as an agent of change and exploitation of the opportunities provided by the cooperation directions and by the new operational concepts).

Considering the role assumed as node of the transformation network, ACT establishes connections with a series of entities that complete the series of the elements identified of the inter-relation structure (Figure 11), setting itself up as a real interface of NATO in the process of involvement, direction, coordination and cooperation of a number of external actors in the multi-dimensional transformation process of the Alliance.

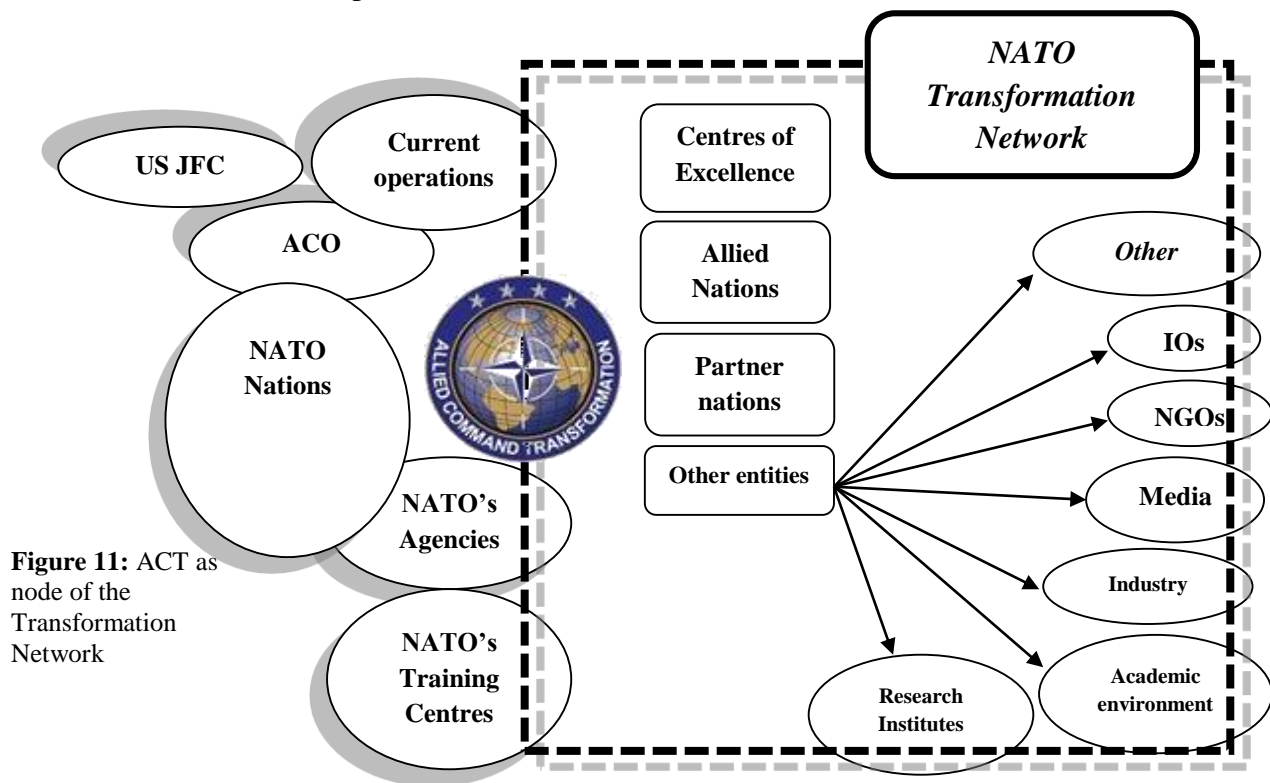


Figure 11: ACT as node of the Transformation Network

As we have previously shown, the interaction mechanisms take different shapes, from the institutionalized ones (Framework for Collaborative Interaction, Working Groups on different themes or functional areas, etc.) up to bilateral or multilateral relations (that may be comprised in the Collaboration Catalogue of ACT with the National Transformation Entities).

The cognitive and technical ability of the Alliance to combine different components of the operational environment by means of the computer networks and of the information

infrastructure (materialized in the NATO Network-based Capability - NNEC⁸¹) illustrates the belief of cooperation (“divide [*information*⁸² – author’s note] to overcome”) as a feature of organizational culture, leading to a more efficient situational awareness and supporting the decisional processes that facilitate, as a last resort, interoperability and action effectiveness, optimizing the resource consumption, saving human lives, etc.

Aiming to ensure the coherence and effective integration of the already existing systems, NNEC targets objectives specific to personal/operators’ level, the architecture of the support processes and technology, with implications to the strategic, operative and tactical levels⁸³. The development of the entire process also aims the relation with the Transformation Network, without accounting for the important contribution that the Centre of Excellence for Command and Control has when catalyzing the system and ensuring a consistent package of good practices in this matter.⁸⁴

The relation of ACT with the *industrial and the scientific research environment* examines the options related to an increased contribution of this environment to the ACT transformational objectives. The protruding element of this relation, the annual event called *ACT Industry Day*⁸⁵, a real forum for discussion on the evolution of ACT cooperation with the industry environment and with other similar agencies (such as the European Defence Agency/EDA), seeks to ensure the access to the relevant expertise of the industrial and research environment in different fields of interest (training by modeling and simulation⁸⁶, Medical Information and Coordination Systems, NNEC⁸⁷, computer assisted exercises (CAX)⁸⁸, defense in the cyber field, NATO Battle-Lab programme, etc.), striving to stimulate the generation of solutions linked to the capabilities necessary to transform NATO.

The *education and training* in NATO, at individual or collective level, represents an essential instrument not only in what concerns the transfer of the knowledge and training of the skills necessary to the operational environment, but they are capable also of promoting the transformation among the NATO states and partners, by linking the educational and training environment to the new ideas, techniques, tactics, procedures, lessons learned and good practices that lead to the facilitation of the future transformation of the force capabilities.

⁸¹http://www.nato.int/cps/en/natolive/topics_54644.htm; The development process of the concept started after the Prague Summit of November 2002, NC3A being liable for it. In 2009, the implementation campaign of the process was initiated within NATO.

⁸² in a secured framework, for the purpose of ensuring the information superiority

⁸³ ***, MCM-0032-2006, in <https://transnet.act.nato.int/WISE/Informatio>

⁸⁴***, C2COE, *NNEC Best Practices Handbook*, Ede – Netherlands, July 2009, in www.c2coe.org and C2COE, *Command and Control in a Network Enabled Environment*, Ede - Netherlands, August 2010, in www.c2coe.org

⁸⁵ See more details on 2010 event in ACT Public Affairs Office, *ACT, EU and Industry come together for ACT Industry Day 2010, 7th October 2010*, in <http://www.act.nato.int/multimedia/archive/42-news-stories/387-act-eu-and-industry-come-together-for-act-industry-day-2010>

⁸⁶ See details on the project in RTO Technical Report, *Federation Development and Execution Process (FEDEP) Tools in Support of NATO Modeling & Simulation (M&S) Programmes*, May 2004, in [http://ftp.rta.nato.int/public/PubFullText/RTO/TR/RTO-TR-MSG-005/TR-MSG-005-\\$\\$\\$ALL.pdf](http://ftp.rta.nato.int/public/PubFullText/RTO/TR/RTO-TR-MSG-005/TR-MSG-005-$$$ALL.pdf)

⁸⁷ Recently, ACT started a program in cooperation with IBM concerning the implementation of some advanced network systems, based on the “cloud-computing” technology – see PRNewsWire, *Technology Collaboration between IBM and NATO Allied Command Transformation*, Norfolk, December 2010, in <http://www.scientificcomputing.com/news-HPC-NATO-to-Improve-Command-and-Control-with-Cloud-Technology-010311.aspx> and <http://www-935.ibm.com/services/us/cloud/>

⁸⁸<http://www.jwc.nato.int/article.php?articleID=234>

If the establishment of formal individual relations of ACT with the entities from the field of national and NATO military education is an option considered to be ineffective⁸⁹, the creation of a network which integrates all these resources is perceived as being an optimum formula – the concerned subject being the NATO Training and Education Network (Figure 12), also including here the Centres of Excellence in the established fields of competence.

At the Chicago Summit in 2012, the importance of expanding education and training, especially within the context of the Connected Forces Initiative (CFI), was outlined as being of outmost importance. CFI aims to ensure the ability of NATO forces to communicate and action coherently, both at tactical level and at higher level (which involves the use of common standards, as well as interoperable equipment).

In this respect, NATO cadres have to follow individual education and training steps teaching them a NATO common approach, while National Forces have to be more involved in joint and combined collective training and exercises that ensures trough increased practice, standardization of skills and better use of technology within Allied environment.⁹⁰



Figure 12 NATO Training and Education Network⁹¹

The relation with the international governmental and non-governmental organizations represents both a requirement related to the comprehensive approach concept (as an expression of the wide cooperation, at all levels, for the purpose of solving the crisis situations that imply an

⁸⁹Allied Command Transformation, *Headquarters Briefing*, NAF Washington DC, 2010, in <https://transnet.act.nato.int/WISE/NATOACTRes/Training/NRNATOComm>

⁹⁰http://www.nato.int/cps/en/natohq/topics_49206.htm

⁹¹***, Allied Command Transformation, *Headquarters Briefing*, NAF Washington DC, 2010, in <https://transnet.act.nato.int/WISE/NATOACTRes/Training/NRNATOComm>

integrated effort), as well as of some concrete working, collaboration and cooperation necessities – as those implied by strategic partnerships with the UN or EU.

As concerns the *relation with the allied nations*, considering that they are liable for the specific tasks used to develop the necessary capabilities, ACT maintains its role of identifying and addressing the possible lacks within the overall process, as well as the role of coordinating and harmonizing the individual efforts of the states.

Concretely, the programs and the projects carried out by ACT and which are extremely important within the transformation network include, related to the different time references, subjects such as:

- technologies/procedures against the improvised explosive devices, civil-military interface, support to the partner forces, management of the lessons learned, law implementation, satellite imagery, expeditionary operations, and strategic communication (in the short-term, based on the national contributions and on the feedback from the theatres of operations);
- use of the special forces, the command, control and support of the resources from the host nation, cyber defence, network-based capabilities, maritime situational awareness, information operations (in the medium term, based on the coordination with the nations on doctrinal development and interoperability standards);
- planning the defence and defining the requirements in what concerns the resources, the articulation of the future requirements related to the necessary capabilities, countering the proliferation of the weapons of mass destruction and the management of their consequences, development of the concepts of joint logistics and joint medical services, comprehension of the future urban operational environment and use of the space (as long-term requirements, based on the conceptual developments and experimentation).

The formal collaboration of ACT with JFCOM, the industry and national entities relevant in the field of transformation is included as a pragmatic objective of the Collaboration Catalogue⁹² (also represented as an online resource), a formula ensuring the necessary visibility in relation with the partners concerning the key elements and the concerns pertaining to the transformation programs and projects of the Alliance.

3.2.2. NATO Partnerships and the Transformation Network

The NATO interaction with the other countries by means of different types of partnership – Partnership for Peace (PfP), Mediterranean Dialogue (MD), Istanbul Cooperation Initiative (ICI), contact countries, but also the nations hosting NATO operations, have an outstanding significance for the NATO Transformation Network.

One of SACT programmatic goals is to consolidate the cooperation with the security partners, by pragmatic relations aiming to improve the level of interoperability, planning, training and communications, exchange and implementation of good practices, as well as the development of capabilities, for the purpose of supporting the transformation process they undergo.

This is materialized by the contributions of the Partner Countries to the comprehensive framework of the training (by the PfP Consortium of the Defence Academies and the Institutes of

⁹²<https://transnet.act.nato.int/WISE/CollaboCat>

Security Studies⁹³, other training Centres managed in cooperation with partners, execution of joint military exercises⁹⁴, by participating (contribution with expertise, funds and personnel) to different institutionalized forms of contribution to the transformation process (participation within different Centres of Excellence, contributions of industry and of the scientific research environment, etc.), by the participation of the military and civil personnel of the Partner Countries to different forms of NATO education and training, and the access to NATO doctrines and procedures⁹⁵, by assistance and guidance to the end of achieving reform objectives (Country Specific Plans and reform schedules for the PfP countries⁹⁶), but also the reform programs of the security system of the countries hosting some operations of the Alliance, or where it is present in various forms (Afghanistan, Iraq), consultations, working visits and exchanges of experience, etc.

It is noted that in time, the partnership relations advanced from initial levels of dialogue and cooperation⁹⁷ towards subjects more important for NATO – including the field of transformation which involves all interacting systems. Thus, the Transformation Network is both the beneficiary of the Partner Countries' contribution and also an interface of the support granted to them by NATO in multiple directions of development. It is remarkable that NATO partnership includes more than 40 dynamic relation programs with PfP, MD, ICI and Contact Countries.⁹⁸

As concerns the NATO Centres of Excellence, the document underlying their establishment (the NATO Military Committee Concept – MCM236-03) supports – besides the relation with NATO structures and agencies – the cooperation with the NATO Partners Nations, but also with external entities (GOs, IOs, Academia, Industry, etc.).

NATO's interest for transformation reached more inclusive dimensions, so that the NATO Transformation Network, in its established form, implies even many other sectors overlapping other transformation networks – an example would be the International Transformation Chairs Network, a forum for discussion, exchange of information and ideas regarding the implications of the national and international security in the global transformation process⁹⁹.

Regarding the strategic relation of NATO with EU, even if it began under the shadow of a series of limitations (Burwell and collab., 2006), it has to take into account the reference points of a new security architecture which may overcome the dilemma competition vs. cooperation (Cornish, 2006) in what concerns the two security systems, equally interested of the transformation coordinates in the field of capabilities, under the conditions when relevance fields particular to each of them begin forming – hence the ACT relevance in this interaction.

The role of the transformation and its results are also very important, by ACT relational filter, in the interaction between NATO and UN, in the comprehensive framework where it is implemented the Joint Statement of 23rd September 2008 (Scheffer and Ki-Moon, 2008), in fields such as: comprehensive approach; situational awareness; exchange of information;

⁹³<http://www.pfpconsortium.org/>

⁹⁴http://www.nato.int/issues/education_and_training/index.html

⁹⁵ including by performing different types of training within some PfP Training Centres

⁹⁶ ***, Military Cooperation Division (SHAPE), *Administrative Support Package - Guidance for PfP/MD/ICI/Contact Country & Pf Staff Element Personnel (PSE) employed within the NATO Environment*, in <https://mcd.pims.org/file/1916/download>

⁹⁷ ***, NATO Public Diplomacy Division, *Security through Partnership*, Brussels, 2005, in <http://www.nato.int/docu/sec-partnership/sec-partner-e.pdf>

⁹⁸ ***, ACT, Web page - *Collaboration Catalogue*

⁹⁹<http://www.ndu.edu/CTNSP/index.cfm?type=section&secid=77&pageid=1>

communications; planning, coordination and operational support; building capacities; training; lessons learned; interoperability and standardization¹⁰⁰.

3.2.3. Control and coordination component of the Transformation Network

If, for the relation with the Allied Nations, ACT has at its disposal the entire military staff and the National Liaison Elements, the coordination of the Transformation Network is made through a body of military general staff called Transformation Network Branch (TNB) (initially known as Transformation Network Coordination Cell (TNCC))¹⁰¹.

Its structure guarantees the interaction with the nations represented at ACT level, and with the classes and components of the general staff of the Headquarter, for the purpose of collecting/distributing the data necessary to the functional relation with customers. The TNB activity is accurately reflected by its own website¹⁰², by means of which there are ensured the necessary connections with the bodies and information of general/particular interest, there are promoted different programs/projects/actions/events with relevance in the field of transformation, or reflecting the contribution of the Transformation Network to the whole process.

Two of the NATO Centres of Excellence (JAPCC and CIMIC) have even initially delegated within TNB permanent positions of liaison officers for the purpose of ensuring a direct relation and a prompt response to the applications for support made and addressed by ACT to NATO structures.

At the same time, TNB provides multilateral counseling both for the elements of the Transformation Network regarding their relation with NATO command and execution structures and the applications for management and support of the direct relations with the representatives of the Transformation Network.¹⁰³

TNB plays a decisive role by supporting the activity of establishment, accreditation and maintenance of the functional standards by the Centres of Excellence¹⁰⁴. Hence, its specialists support the drafting of the instruments of foundation of the Centres, the negotiation and accession process of other participating entities, being part of the evaluation commissions for accreditation and supporting the subsequent activation process of the Centres of Excellence as NATO accredited International Military Organizations.

The main activities organized by TNB regarding the coordination of the Centres of Excellence are, with annual iterations: the Conference of Directors of Centres of Excellence, Visibility Conference of Centres of Excellence, and the Program of Work Workshop for Centres of Excellence. Furthermore, TNB ensures the promotion of the Centres of Excellence and of their programs by various means, including by publishing the promotional materials (such as the Catalogue of NATO Centres of Excellence, an annually updated document which provides details

¹⁰⁰ See developments in *UN-NATO Education days* in Dec. 2009 (New York) and Feb. 2010 (Brussels)

¹⁰¹ The transformation of the coordination structure from the cell level to the one of a branch, as well as the development of its structure and composition, unequivocally prove the increasing importance of the transformation network within ACT

¹⁰² <https://transnet.act.nato.int/WISE/TNB>

¹⁰³ By drafting a Catalogue of the Centres of Excellence, but also by hosting a webpage dedicated to them (<https://transnet.act.nato.int/WISE/COE>), which lists the main capabilities of the Centres, as well as the contact elements in order to approach the subjects of interest

¹⁰⁴ The necessary steps are mentioned in a “Handbook of Centres of Excellence” drawn up by TNB which provides a detailed action pattern concerning the establishment of such institutions, as well as examples of instruments of incorporation

on the mission and main projects in which the Centres are engaged, including contact points – Figure 13).

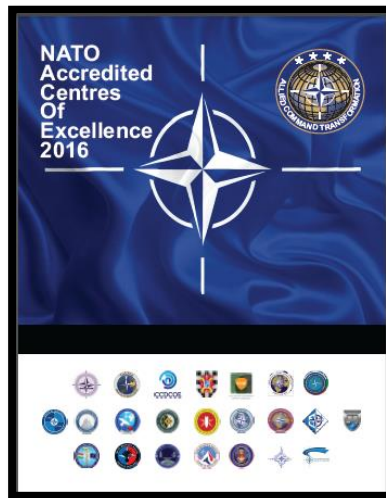


Figure 13 NATO Centres of Excellence Catalogue (2016)

TNB ensure an institutionalized framework for discussing the problematic issues of any nature related to the operation and activity of the Centres of Excellence, allow the increase of the degree of understanding at level of NATO Command Structures when it comes to the place and role of the Centres of Excellence, to the end of enhancing the quality of the requests for support addressed by them, of avoiding the duplication of efforts and ensuring the necessary synergy. It provides, at the same time, the necessary support for the implementation of the requests for support made by NATO structures and the alignment with the directions, programs and projects submitted to the transformation process.

Additionally, the bilateral interaction process of TNB with the Centres of Excellence for the purpose of coordinating and counseling is a permanent one, being thus ensured the quick solving of some emergency requests.

3.3. Viewpoints regarding NATO Centres of Excellence

The existence of NATO Centres of Excellence origins in the reorganization of military command structure of the Alliance and in launching the transformation process under the auspices of ACT, after the Prague Summit of 2002.

Once it was noticed the necessity of some additional resources to support the efforts of ACT in the field of transformation, NATO Military Committee mandated the allied nations, by its Concept regarding the Centres of Excellence – MCM 236-03, to set up in an established framework and in certain conditions, Centres of Excellence meant to promote the transformation within the Alliance, these being understood as “national or multinational entities capable to provide the expertise and experience acknowledged for the support of the Alliance, especially to support the transformation”. The support expected from the Centres of Excellence exceeds the field of education and training, these providing products and services covering a wider range of activities and in different fields of interests, deficient in capabilities at the level of Alliance, as we shall subsequently show.

3.3.1. NATO Centres of Excellence – general principles

The Centres of Excellence are entities enjoying the status of International Military Organization, under the auspices of Paris Protocol, affiliated to the Allied Command Transformation, but without being part of the NATO Command Structure. The functional particularities and the principles underlying their activities are the following:

- Centres of Excellence are open to the participation of all members of the Alliance; the access of the partner states or other organizations to the products and services of the Centres lays on the decisions of the governing boards, based on the limitations imposed by the specific security requirements;
- non-duplication of the resources or means or competing with NATO existing capabilities; by virtue of the purpose of adding value to the already existing expertise, the Centres of Excellence have to be capable of providing tangible improvements of the capabilities targeted by the Alliance, in complementarity with the efforts of other structures/agencies involved;
- financial support is provided by the participating nations (mainly by the framework nation/nations and, proportionally with the degree of participation, by the sponsor nations), regarding the costs of infrastructure, operation and maintenance;
- compliance with NATO security procedures, doctrines, standards and policies;
- distinctive labor relations between the participating nations and the Steering Committee (as a decisional body of the Centre), specified in the Memoranda of Understanding and technical approvals;
- program of work pursuant to NATO requests for support.

The establishment of the network of NATO Centres of Excellence has multiple meanings, both for NATO and for the participating nations. First of all, the Centres generally provide special opportunities for the educational and training process, they determine the improvement of the level of interoperability and of the existing capabilities, support the process of doctrinal evolution and validation of the concepts by experimentation, contribute to the profiling and dissemination of good practices and lessons learned in their fields of expertise.

To this end, the operation of the Centres of Excellence covers partially or totally a wide range of responsibilities, such as:

- supporting NATO forces in order to improve the capabilities of planning, preparation and management of operations;
- experimentation, validation and implementation of new concepts, techniques, tactics and procedures, results of scientific research processes or as good practices/lessons learned from operations or exercises;
- supporting the innovation, technical and technological research in the fields of responsibility;
- supply of products and services specific to the standardization process (doctrines, standards, procedures, evaluation instruments, etc.) supporting the requirements of interoperability;
- providing expertise for NATO structures and partner states;
- outlining the individual and collective educational and training framework in the functional fields assumed.

All these levels of involvement are monitored as part of the working tool of the Centres of Excellence – the program of work – and they are defining for the pillars that set the taxonomy of the directions supporting the transformation process in NATO:

- analysis and lessons learned;
- conceptual development and experimentation;
- doctrine and standardization;
- education and training.

These directions are materialized and are effective by means of exercises, courses, conferences, working groups and workshops, publication of academic and functional materials, analyses and compendiums of good practices and lessons learned, participation to processes of experimentation and validation of new concepts, promotion of technical and technological innovations etc.

The Centres of Excellence totally or partially assume the extension of the work program on all these directions supporting the transformation; while some focus almost exclusively on education and training, assuming a status similar to the one of a training Centre, others aim to define a “think-tank” profile or a comprehensive range that reaches all defining dimensions of transformation and development of the force capabilities.

The programs of work of Centres of Excellence are mainly set based on the priorities represented by the requests for support made by NATO, the projects of the participating nations and the customers’ demands regarding certain products and services, based on their priority and approval within the Steering Committee (management body of the Centre, including the representatives of all participating nations).

Thus, by the resources and capabilities they have, by the work programs, products and services they put at disposal, the Centres of Excellence tend to gain a decisive role in the fields of expertise they govern.

Providing the beneficiaries exquisite opportunities of education and training, supporting the process of interoperability, strengthening the existing capabilities and supporting the development of concepts, doctrines and standards, but also the processes of analyses and processing of the lessons learned, they act as true vectors that multiply the force, becoming indispensable means in the transformation process managed by ACT.

3.3.2 NATO Centres of Excellence – functional sheets. Significances in the field of transformation

Each Centre of Excellence has its particularities, beginning with the way it was set up or the institutional evolution up to the established form and the relevance ensured by the degree of involvement in the field of expertise at the level of NATO transformation requirements. Hence, the activation circumstances, the nations involved in the project, the concept of operation, the mission assumed, the established working relations, the degree of visibility and openness, all have meanings that an analytical approach may exploit them multi-dimensionally. We will briefly review the defining elements of each Centre, listed by some concise functional forms, with reference to the websites managed by the respective organizations with the purpose of ensuring easy access to the consistent data and information regarding the functional aspects and the products of each.

COEs establishment emerged as a result of the Prague Summit in 2002, when the Allied Command Atlantic became the Allied Command Transformation, responsible for transformation of the Alliance into a more efficient organization.

Part of this strategy, the Joint Air Power Competence Centre in Germany and the Defence against Terrorism Centre of Excellence in Turkey became the first institutions to receive NATO COE accreditation in 2005 and 2006, respectively. The NATO Centres of Excellence network

(Figure 14) counts, as of December 2015, a number of 23 accredited Centres, and one in the accreditation development phase – see Table 1.

No	COE	Acronym	Status	Location	Framework Nation
1	Command and Control COE	C2 COE	Accredited	Utrecht	Netherlands
2	Analysis and Simulation Centre for Air Operations	CASPOA	Accredited	Lyon	France
3	Cooperative Cyber Defence COE	CCD COE	Accredited	Tallinn	Estonia
4	Counter-Improvised Explosive Devices COE	CIED COE	Accredited	Madrid	Spain
5	Civil-Military Cooperation COE	CIMIC COE	Accredited	Hague	Netherlands
6	Combined Joint Operations from the Sea COE	CJOS COE	Accredited	Norfolk	USA
7	Crisis Management and Disaster Response COE	CMDR COE	Accredited	Sofia	Bulgaria
8	COE for Operations in Confined and Shallow Waters	CSW COE	Accredited	Kiel	Germany
9	COE for Cold Weather Operations	CWO COE	Accredited	Elverum	Norway
10	COE Defence Against Terrorism	COE DAT	Accredited	Ankara	Turkey
11	Energy Security COE	ENSEC COE	Accredited	Vilnius	Lithuania
12	Explosive Ordnance Disposal COE	EOD COE	Accredited	Trencin	Slovakia
13	Human Intelligence COE	HUMINT COE	Accredited	Oradea	Romania
14	Joint Air Power Competence Centre	JAPCC	Accredited	Kalkar	Germany
15	Joint Chemical Biological Radiological & Nuclear Defence COE	JCBRN COE	Accredited	Vyskov	Czech Republic
16	Military Engineering COE	MILENG COE	Accredited	Ingolstadt	Germany
17	COE for Military Medicine	MILMED COE	Accredited	Budapest	Hungary
18	Military Police COE	MP COE	Accredited	Bydgoszcz	Poland
19	Modelling and Simulation COE	M&S COE	Accredited	Rome	Italy
20	Mountain Warfare COE	MW COE	Accredited	Poljce	Slovenia
21	Naval Mine Warfare COE	NMW COE	Accredited	Oostende	Belgium & Netherlands
22	Stability Policing COE	SP COE	Accredited	Vicenza	Italy
23	Strategic Communications COE	STRATCOM COE	Accredited	Riga	Latvia
24	Counter Intelligence COE	CI COE	In Accreditation Process	Krakow/ Lest	Poland & Slovakia

Table 1 NATO COE status – December 2015 (based on data retrieved from COEs' webpages)

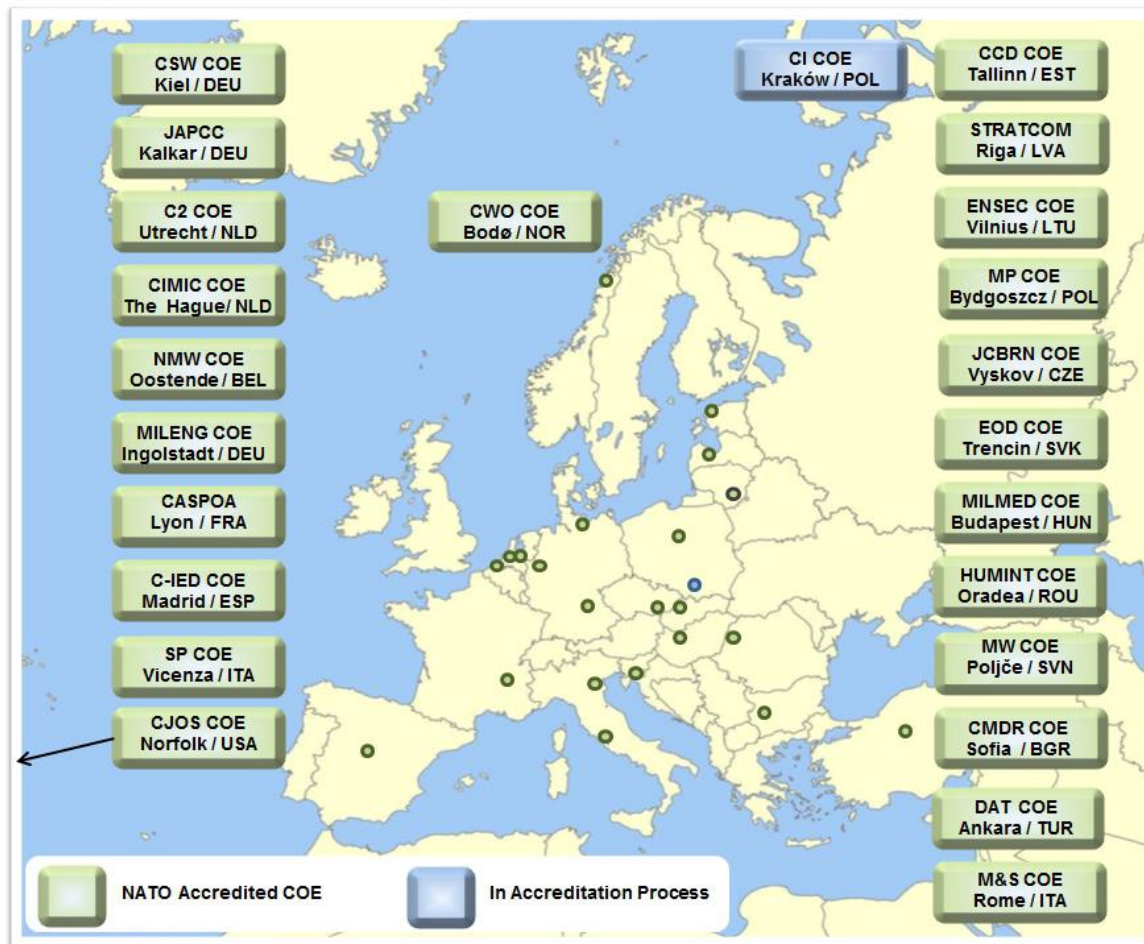


Figure 14 NATO COE Map as of December 2015 (NATO COE Catalogue 2016)

In the next part of this chapter I will briefly point out few details of the COEs, based on the information available on their websites, the NATO COEs Catalogue, or other COE-issued public documents.

The main scope behind this short inventory is to outline aspects of interest especially for customers mostly from the academic and research environment, who can find areas of common interest that can serve improving their work. This is nonetheless a challenge for seeking cooperation between COEs and other interested entities; the experience proved real added value in cases of common projects, where co-working parties – military and civilian – exchanged information and brought complementary views.

1) Command and Control (C2) COE

Location: Utrecht, the Netherlands

Accreditation: in 2008

Framework Nation: The Netherlands

Participating Nations: Belgium, Estonia, Germany, Norway, Slovakia, Spain, Turkey, USA



The NATO C2COE supports the Alliance, member states and international institutions or organizations by providing subject matter expertise on all aspects of the Command and Control

(C2) process with a focus on the operational environment¹⁰⁵; in this respect, networking with Sponsoring Nations, ACT and ACO and other international institutions / organizations ensures a wide consensus on a topic still suffering the lack of a commonly accepted definition. Thus, C2 is addressed through a working definition that accounts *”the exercise of authority by a properly designated commander over assigned and attached forces, performed through an arrangement of personnel, equipment, communications, facilities and procedures in the accomplishment of the mission”*¹⁰⁶.

The C2COE core products – either dissemination of knowledge and shared information (through coaching & mentoring, education and training, symposia and workshops, participation in exercises, or publications) or policy development (with relevance in fields as Federated Mission Networking Implementation, Urbanization Concept, Strategic Foresight Analysis, Framework for Future Alliance Operations, support to HQs decision cycle, enhancement of C2 Agility, or NATO Maritime Deployable C2 Capability) – have proved their value for capability development within the NATO transformation process.

The C2COE publishes a Review Document after each event (co)organized by the Centre, giving readers an overview of the key themes of the activity and some of the lessons identified.¹⁰⁷

2) Centre for Analysis and Simulation of Air Operations (CASPOA)¹⁰⁸

Location: Lyon, France

Accreditation: 2008

Framework Nation: France

Participating Nations: Canada, Germany, Italy, UK, USA



CASPOA builds on its specific expertise in air operations and in combined and joint environments by acting in multiple areas defining the capability development – interoperability, standardization, education and training (addressed to staff elements that plan and conduct air operations at the operational and tactical levels, or testing and validating new simulation capabilities) and concepts development and experimentation (explore concepts and experiment on new supporting technologies related to air operations in close relationship with the JAPCC). CASPOA also collaborate with JALLC and JAPCC regarding the collection and analysis of observations/lessons/best practice from operations and training events and contribute to establishing the NATO knowledge base in the air C2 area, offering technical expertise for C2 Systems within the community of interest.

Besides providing specialized education and training, CASPOA is Department Head for Air C2 Systems education and training in NATO, performing all incumbent tasks in relation with the stakeholders.

¹⁰⁵<http://c2coe.org/organisation/c2coe-mission-and-vision-2/>

¹⁰⁶ Ibidem

¹⁰⁷<http://c2coe.org/publications/review-documents/>

¹⁰⁸ Centre d'Analyse et de Simulation pour la Préparation aux Opérations Aériennes – CASPOA, <http://www.caspoa.org/>; description of the provided expertise is based on data retrieved from the CASPOA website

3) Cooperative Cyber Defence (CCD) COE

Location: Tallinn, Estonia

Accreditation: 2008

Framework Nation: Estonia

Participating Nations: Austria, Czech Republic, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands



CCDCOE fosters to enhance the capability, cooperation and information sharing among NATO, its member nations and partners in cyber defence by virtue of education, research and development, lessons learned and consultation¹⁰⁹.

A masterpiece of CCDCOE-driven scholar thinking is the Tallinn Manual¹¹⁰ on the International Law Applicable to Cyber Warfare, written by an independent international Group of Experts. Even though not an official document, it provides valuable opinions and findings on the cyber operations qualified as "armed attacks", which prone States to respond in self-defence, as well as cyber operations taking place during armed conflict. The follow-up version of the Manual is meant to approach malevolent cyber operations against States in conditions that do not rise to the aforementioned levels, by examining the international legal framework that applies to such operations.

A useful tool provided by CCD COE is its interactive database INCYDER (International Cyber Developments Review), linking to legal and policy documents adopted by international organizations active in cyber security, including features descriptions and news about the selected organizations¹¹¹. This opportunity is doubled by an impressive Cyber Security Publications Library¹¹², which lists results of CCD COE research work and academic outreach, as well as case studies on National Cyber Security Organization of the NATO countries, with focus on the division of cyber security tasks and responsibilities between different agencies, their mandate, tasks and competence, and coordination among them.

4) Counter-Improvised Explosive Devices (C-IED) COE

Location: Madrid, Spain

Accreditation: 2010

Framework Nation: Spain

Participating Nations: Germany, USA, France, Hungary, Netherlands, Portugal, Czech Republic, Romania, Turkey, Sweden



The C-IED COE mission is to provide expertise to stakeholders in the fight against IEDs and cooperate to increase security by countering, reducing or eliminating the threats from IEDs used or for use, in particular by terrorists or insurgents.¹¹³

The C-IED COE pursues its objectives in support of NATO transformation and operations by addressing all aspects of the C-IED process, in cooperation with national and international

¹⁰⁹<https://ccdcoe.org/>

¹¹⁰<https://ccdcoe.org/research.html>

¹¹¹<https://ccdcoe.org/incyder.html>

¹¹²<https://ccdcoe.org/publication-library.html>

¹¹³<http://www.coec-ied.es/about/>

organizations from all the communities involved in the C-IED fight (military, law enforcement, intelligence, and academia).

In this respect, the Centre is involved in multiple areas of development within the C-IED community, to mention: information sharing; technology development; education and training solutions. C-IED COE is the NATO C-IED Training Department Head since 2013, position from which it coordinates international training efforts, avoiding duplications and identifying special training expertise. As NATO Education and Training Facility, C-IED COE offers a variety of courses¹¹⁴ (Staff Officer Awareness Course, Weapons Intelligence Team Course, C-IED Awareness Senior Leadership Seminar, C-IED Awareness Course for non-NATO nations).

The Centre is also involved in processing Lessons Learned / Best Practices in connection with NATO JALLC, which facilitates the NATO C-IED Community of interest.

5) Civil-Military Cooperation COE (CCOE)

Location: The Hague, the Netherlands

Accreditation: 2007

Framework Nations: Germany and the Netherlands

Participating Nations: Denmark, Hungary, Latvia, Poland, Slovenia

The Centre is also open to international organizations (EU, NGOs and scientific institutions).



CCOE has assumed as mission to assist NATO, the Sponsoring Nations and other military and civil institutions/organizations in their operational and transformation efforts in the field of civil-military interaction by providing innovative and timely advice and subject matter expertise in the development of existing and new concepts, policy and doctrine; delivering specialized education and training; and contributing to the lessons learned processes in the area of expertise¹¹⁵.

In this endeavour, beside its consecrated connections within the Alliance, being part of a consistent international network of experts from a large number of governmental and non-governmental organizations, civilian universities, research institutes, military academies and other relevant actors is a necessity that ensures the required knowledge, expertise and competencies.

In its academic outreach and education and training programme, CCOE uses the NATO CIMIC doctrine and procedures as the reference standard. A complete list of the CCOE publications available to the interested public is available at <http://www.cimic-coe.org/products/conceptual-design/downloads/ccoe-publications/>.

6) Combined Joint Operations from the Sea (CJOS) COE

Location: Norfolk, Virginia, United States

Accreditation: 2006

Framework Nation: The United States

Participating Nations: Canada, France, Germany, Greece, Italy, Netherlands, Norway, Portugal, Romania, Spain, Turkey, UK, USA



¹¹⁴<http://www.coec-ied.es/documents/>

¹¹⁵<http://www.cimic-coe.org/about-cimic/>

CJOS COE (through the Sponsoring Nations and other partnering entities) works in conjunction with the U.S. Fleet Forces in order to support the improvement of the allied ability to conduct combined joint operations from the sea into a challenging global environment. Thus, CJOS COE provides solutions for education and training, provisions specialized exercises, supports the doctrinal development and, overall, contributes to enhancing interoperability in maritime operations.

CJOS COE products cover a broad array of specialty topics, as well as multidisciplinary aspects, from which we would point out some of the most relevant projects or areas of interest¹¹⁶ - the Maritime Situational Awareness and International Maritime Security Cooperation, Amphibious Operations Planning, development of the NATO Joint Sea-Based Logistic Support concept, Maritime Unmanned Systems, Humanitarian Assistance/ Disaster Relief, the future use of Riverine Forces in Expeditionary Operations, Energy and Cyber Security Challenges in the Maritime Domain, legal aspects of the Maritime Security, or Maritime Approach to Combined Operational Access (MACOA).

CJOS COE publishes annually the prestigious magazine “*Cutting the Bow Wave*”, where the results of the research in maritime operations and environment, conducted by its own staff or provided by contributors from different entities, is presented to the interested public. As part of its academic outreach, CJOS COE has signed in 2015 a Cooperation agreement with the National Defense University “Carol I” of Ministry of National Defence, Bucharest – Romania¹¹⁷.

7) Crisis Management and Disaster Response (CMDR) COE

Location: Sofia, Bulgaria

Accreditation: 2015

Framework Nation: Bulgaria

Participating Nations: Greece, Poland



CMDR COE provides support to NATO transformation and foresees the enhancement of NATO capabilities in the Crisis Management and Disaster Response domain, by:¹¹⁸

- improving interoperability,
- development of correspondent NATO policy, Doctrine and Concepts related to crisis management and disaster response activities,
- providing assistance for the effective use of joint experience and capabilities of NATO, Nations, Partners and international organizations in the field of crisis management and disaster response;
- offering education and training solutions for military personnel, government officials and civilians, and organizational structures in the field of crisis management and disaster response.

In a larger spectrum of activities¹¹⁹, the CMDR Interagency Interaction Seminars are annual events which gather subject matter experts, researchers and educators, planners and developers, consultants and various actors working in the crisis management and disaster response domain in order to promote scientific debate on these issues, with the aim to improve

¹¹⁶<http://www.cjoscoe.org/projects/programmeofworkitems.html>

¹¹⁷<http://www.cjoscoe.org/cooperativeagreements.html>

¹¹⁸http://cmdrcoe.org/menu.php?m_id=18

¹¹⁹ See the CMDR COE Customer Catalogue of services, <http://cmdrcoe.org/>

the common understanding of interagency cooperation in the area of CMDR and to contribute to the Comprehensive Approach in this field.

In this respect, the seminar focuses on key aspects, such as:

- Crisis Management and Disaster Response Policies and Interactions;
- Future Operations in Urban Environment;
- Best Practices in CMDR Education and Training.

8) Operations in Confined and Shallow Waters (CSW) COE

Location: Kiel, Germany

Accreditation: 2008

Framework Nation: Germany

Participating Nations: Finland¹²⁰, Greece, Italy, Netherlands, Poland, Turkey, USA¹²¹



Co-located with the staff of the German Flotilla 1 in Kiel, whose commander is double-hatted as Director to COE CSW, the mission of the Centre is to provide expertise in the range of operations in confined and shallow waters for NATO and the nations participating in the COE CSW, in order to expand Alliance's confined and shallow-water war fighting capabilities and advance future developments in support to NATO transformation.

Specific responsibilities assumed by COE CSW are:¹²²

- facilitation of the development, validation and implementation of concepts and doctrines;
- contribution to the lessons learned process;
- participation to experiments and modeling and simulation efforts;
- contribution to NATO's efforts in the field of exercises, education and training;
- assessment of the requirements, the present status and the future development of operations in confined and shallow waters in a joint and combined operational environment.

9) Cold Weather Operations COE (COE-CWO)

Location: Bodø/ Elverum, Norway

Accreditation: 2007

Framework Nation: Norway

Participating Nations: -



The NATO Centre of Excellence for Cold Weather Operations (COE-CWO) is a concept that encompasses training areas, infrastructure, manpower and knowledge drawn from all branches of the Norwegian Armed Forces¹²³, to which is added the Norwegian Defence Research Establishment, the NATO and PfP Cold Weather Community of Interest, and Civilian Academia (NATO COE Catalogue 2016). In this spectrum, the Norwegian School of Winter Warfare (NSWW) is one of the key contributors¹²⁴.

¹²⁰ joining in 2011, Finland became the first "Contributing Nation" to a NATO COE

¹²¹ USA is participating in the COE CSW through the 'Personnel Exchange Program' with the German Navy; therefore, USA is not counted as a Sponsor Nation *per se* in the analytical charts of the paperwork

¹²² <http://www.coecsw.org/our-coe/our-coe/>

¹²³ <https://forsvaret.no/en/education-and-training/coe-cwo>

¹²⁴ <https://forsvaret.no/en/education-and-training/winter-warfare>

The COE CWO supports the NATO planning process for Cold Weather Operations and is prepared to accommodate a variety of requirements – from individual training to unit level training, certification, courses¹²⁵, seminars, literature or advice, covering specific topics within the winter warfare – and conducts research and analysis on nutrition, survivability and sustainability during Cold Weather conditions. Findings of the COE CWO projects are included in a series of publications available at <https://forsvaret.no/en/education-and-training/coe-cwo>.

The COE CWO is also actively involved in supporting the NATO lessons learned process.

10) Defence Against Terrorism (DAT) COE

Location: Ankara, Turkey

Accreditation: 2006

Framework Nation: Turkey

Participating Nations: Bulgaria, Germany, Hungary, Netherlands, Romania, UK, USA



In the virtue of the assumed mission of supporting NATO transformation efforts, namely in the field of defence against terrorism, COE-DAT provides to stakeholders¹²⁶:

- subject matter expertise on defence against terrorism,
- defence against terrorism training and education at the strategic and operational level,
- assistance (notably to HQ SACT) in testing and validating terrorism related NATO concepts through experimentation,
- support in doctrine/ standards development by contributing knowledge and lessons identified,
- support for the improvement of anti/counter terrorist capabilities and interoperability in NATO.

COE-DAT makes available on his website an impressive collection of scientific outcomes, consisting of research and studies, DAT review series, workshop books, or course reports¹²⁷.

11) Energy Security (ENSEC) COE

Location: Vilnius, Lithuania

Accreditation: 2012

Framework Nation: Lithuania

Participating Nations: Estonia, France, Georgia, Italy, Latvia, Turkey, UK



The NATO ENSEC COE supports NATO's capability development process, operational effectiveness, and interoperability by providing expertise on operational energy security matters, as well as cost effective solutions to support military requirements, energy efficiency in the operational field, and interaction with academia and industry.

¹²⁵<https://forsvaret.no/en/education-and-training/coe-cwo/courses>

¹²⁶<http://www.coedat.nato.int/about.html>

¹²⁷<http://www.coedat.nato.int/publication.html>

In this respect, the ENSEC COE is engaged in different fields of activity, providing to stakeholders/ customers¹²⁸:

- technical, scientific and academic expertise in field of energy security that contributes to risk assessment analysis;
- solutions for the development of environmentally friendly and efficient military capabilities in support of Smart Defence;
- analysis on various aspects of energy supply and critical energy infrastructure protection in areas of concern to NATO;
- targeted technical scientific evaluation, advice and solutions for development of energy efficient forces in support of NATO Operations;
- assessments on the future needs in NATO transformation activities, seeking to prevent or mitigate emergent military threats and challenges, which result from the global scarcity of energy resources and the complexity of the international energy system.

12) Explosive Ordnance Disposal (EOD) COE

Location: Trenčín, Slovakia

Accreditation: 2011

Framework Nation: Slovakia

Participating Nations: Czech Republic, France, Hungary, Poland, Romania



The EOD COE mission is to improve relations, interoperability and a practical cooperation with partners, NATO command elements, member countries and international organization in the area of EOD through the leveraging of the latest information and capability development aiming to prepare technologically advanced, interoperable and well trained NATO EOD experts to enable the entire spectrum of Alliance operations, with the ultimate scope of supporting and enhancing the NATO transformation and operational efforts in the EOD functional area.¹²⁹

In this respect, the Centre's products cover areas of standardization, doctrine development, concept validation, and education and training. The EOD COE activity as NATO Education and Training Facility, in line with NATO Quality Assurance requirements, is reinforced by lessons learned, concepts and doctrines development, and EOD applicable technologies¹³⁰.

¹²⁸<http://www.enseccoe.org/en/about-us/centre-of-excellence.html>

¹²⁹<https://www.eodcoe.org/en/about-us/mission-and-vision>

¹³⁰ Within the four pillars of transformation in NATO, the NATO EOD COE: collects, stores and analyses EOD operational lessons; provides multinational hub for information sharing and comparison; organise and hosts symposia and seminars; provides C2 pre-deployment training and EXER, if required; provides premises for EOD training classes; provides support and consultation to NATO EXER; maintains working group knowledge in NATO standards; amends and revises NATO normative; assists in identification and harmonisation of EOD multitude training; supports trials and experimentation in new EOD capabilities. (EOD COE, *Education and Individual Training Quality Assurance Policy*, 2015, in [https://eodcoe.org/data/uploads/files/NATO%20EOD%20COE%20QA%20policy%2019092015%20\(2\).pdf](https://eodcoe.org/data/uploads/files/NATO%20EOD%20COE%20QA%20policy%2019092015%20(2).pdf))

13) Human Intelligence (HUMINT) COE

Location: Oradea, Romania

Accreditation: 2010

Framework Nation: Romania

Participating Nations: Czech Republic, Greece, Hungary, Poland, Slovakia, Slovenia, Turkey, USA



NATO HUMINT Centre of Excellence (HCOE) provides the highest quality NATO HUMINT - focused services and products in response to the requirements and needs of the NATO Command Structure, NATO Force Structure, NATO Nations and, when feasible, Partner Nations.

The HCOE programme of work is ambitious in scope and aims to improve the NATO HUMINT capability through a large array of products encompassed by the four transformational pillars, which are the Centre's core competencies – doctrine and standards, concept development and experimentation, education and training, and lessons learned.

HCOE is highly dedicated to reach top levels of development in all functional dimensions that shape its status, being connected to the most important NATO Working Groups governing change, being accredited as NATO Education and Training Facility and appointed as Department Head for HUMINT Education and Training in NATO, ensuring the custodianship of NATO HUMINT Doctrine and Techniques, Tactics, and Procedures, running the NATO LL/BP Community of Interest, and conducting research within a large spectrum of topics, both theoretical and practical, connected to the HUMINT discipline transformation objectives.

14) Joint Air Power Competence Centre (JAPCC)

Location: Kalkar, Germany

Accreditation: 2005

Framework Nation: Germany

Participating Nations: Canada, Czech Republic, Germany, Greece, Hungary, Italy, Netherlands, Norway, Poland, Romania, Spain, Turkey, UK, USA



JAPCC, the first accredited NATO COE and one of the most sponsored by Member Nations holds as primary customers the NATO Headquarters (ACO, ACT, NATO Joint Commands and Air Command) and its national contributors, while is still open to further requests for support, upon the case.

With numerous successful events and products (studies, reports, journal articles, seminars, panels and conferences) and ever increasing connections with industry and academia, the JAPCC continues to build upon its hard-earned reputation as NATO's preeminent advocate for the development and enhancement of Joint Air&Space (A&S) Power¹³¹, dedicated to improve the space, land and maritime air power operations of the Alliance by developing and advancing new ideas for the command, control and use of air assets from all service branches. JAPCC also provides support for the implementation of its outputs.

¹³¹<https://www.japcc.org/about-japcc/>

15) Joint Chemical, Biological, Radiological and Nuclear Defence (JCBRN Defence) COE

Location: Vyškov, Czech Republic

Accreditation: 2007

Framework Nation: Czech Republic

Participating Nations: France, Germany, Greece, Hungary, Italy, Poland, Romania, Slovakia, Slovenia, UK, USA



The JCBRN Defence COE has a complex mission, starting from specialized advisory function to widely supporting the transformation and interoperability in CBRN Defence area through developing doctrines, standards, providing education and training products, contributing to the relevant lessons learned processes and assisting its stakeholders in their CBRN defence related efforts, including validation through experimentation.¹³²

The initial core mission of the Joint CBRN Defence COE has diversified since 2014 following the acceptance, implementation and provision of reach back and operational planning support capabilities to NATO (Gusteritean, 2015).

In support of its objectives, the Joint CBRN Defence COE provides a comprehensive program of work, developed along the main areas of expertise and support and delivered through: standards' review programs, publications, workshops and conferences, courses and exercises, lessons learned activities (collection and analysis), modelling and simulation capabilities development, experimentation support, or expert support to Capability Development and Defence Planning and Reach-Back and Operations support.¹³³

16) Military Engineering (MILENG) COE

Location: Ingolstadt, Germany

Accreditation: 2010

Framework Nation: Germany

Participating Nations:¹³⁴ Canada, Czech Republic, Denmark, France, Germany, Greece, Italy, Poland, Netherlands, Norway, Romania, Spain, Turkey, UK, USA



The MILENG COE mission is to enable the development of the military engineering capability and interoperability of NATO Nations, in order to enhance the effectiveness of MILENG support to NATO and other operations¹³⁵.

In this respect, MILENG COE – although Department Head for the MILENG Training and Education Discipline in NATO – provides a generous education and training offer, in-situ or through Advanced Distribution Learning (ADL) platforms¹³⁶.

¹³²<http://www.jcbrncoe.cz/index.php/organization-65/mission-64>

¹³³<http://www.jcbrncoe.cz/index.php/projects-66/jcbrn-defence-coe-program-of-work-2015>

¹³⁴In April 2014 Hungary confirmed the interest to join MILENG COE. HUN is at the moment present with a voluntary national contribution. If the notice to join is officially signed, this will raise the number of Sponsoring Nations to 17, which will make MILENG COE the biggest of all COEs in number of participating countries.

(<http://milengcoe.org/milengcoe/Pages/History-of-the-MILENG-COE.aspx>)

¹³⁵<http://milengcoe.org/milengcoe/Pages/default.aspx>

¹³⁶<http://milengcoe.org/course/Pages/default.aspx>

MILENG COE is involved at the hearth of the Military Engineering capability transformation: the Director MILENG COE is the Principal Advisor to SACT for the functional area, the Deputy Chairman of the Military Committee Land force Standardization Board - MILENG WG, the Chairman of MILENG DPAG (to provide SME in support of NATO Defence Planning Process) and Member of the NSJEC Advisory Board. The MILENG COE provides the secretariat for the annual NATO Senior Joint Engineer Conference (NSJEC), and is a permanent member of the NATO CIED Task Force. The MILENG COE is equally engaged in all aspects covered by the MILENG Functional Area, like Environmental Protection, Infrastructure and Energy Efficiency¹³⁷.

17) Military Medicine (MILMED) COE

Location: Budapest, Hungary

Accreditation: 2009

Framework Nations: Hungary

Participating Nations:¹³⁸ Belgium, Czech Republic, France, Germany, Italy, Netherlands, Romania, UK



Throughout its 4 medical branches¹³⁹, NATO MILMED COE supports its stakeholders/customers - the NATO Command Structure, other NATO bodies, national medical services and civilian organizations - with subject matter expertise in the following domains:¹⁴⁰

- Individual and collective medical training (exercises);
- Evaluation of medical units;
- Medical Lessons Learned and Medical Knowledge Management;
- Interoperability;
- Health surveillance in the deployed environment.

The ultimate goal of this endeavour is to further develop and improve medical support to NATO operations, based on expertise resulted from innovation, experience and sharing best practices

NATO MILMED COE has developed a consistent specialty database¹⁴¹, making available various information included in newsletters, STANAGs, or lessons learned products.

18) Military Police (MP) COE

Location: Bydgoszcz, Poland

Accreditation: 2014

Framework Nation: Poland

Participating Nations: Bulgaria, Croatia, Czech Republic, Germany, Italy, Netherlands, Romania



¹³⁷<http://milengcoe.org/milengcoe/Pages/default.aspx>

¹³⁸The United States of America is in joining process and have already provided personnel since August 2014 (<http://www.coemed.org/about-us>)

¹³⁹Deployment Health Surveillance Capability (DHSC) – a satellite branch located in Munich, Germany; Interoperability, Lessons Learned and Training

¹⁴⁰<http://www.coemed.org/about-us>

¹⁴¹<http://www.coemed.org/database>

The mission of the NATO MP COE is to enhance the NATO MP capability by providing subject matter expertise on all aspects of MP activities, thus improving the Alliance's interoperability in the field of MP operations¹⁴².

The NATO Military Police COE supports the development of MP standards and capabilities by providing analytical and methodological support to stakeholders, supporting and coordinating implementation and validation of standards, providing advisory expertise, ensuring LL/BP management in the field of expertise, formulating, experimenting, reviewing and recommending new concepts and directions for utilization within Military Police multinational operational environment.

To do so, MP COE fosters a cooperative environment in relation with national, NATO and partner institutions and Subject Matter Experts responsible for transformation of their Armed Forces, especially in the frame of military police activities.

The MP COE also provides a generous education and training offer, enclosing hosted courses and advanced distribution learning opportunities¹⁴³.

19) Modelling and Simulation (M&S) COE

Location: Rome, Italy

Accreditation: 2012

Framework Nation: Italy

Participating Nations: Czech Republic, USA



The NATO M&S COE supports operational requirements, training and interoperability for its stakeholders/ customers by providing subject matter expertise on all aspects of the M&S activities, with focus on: *education and training* (courses, conferences, seminars and workshops); *knowledge management, Lessons Learned & Analysis* (lessons analysis, development and management of shared repositories and web based fora for scenarios, models, simulations, data, techniques, tools and best practices); *support to Concept Development & Experimentation* (for scenarios, models and simulations, integration of existing NATO and national M&S tools and activities, development of future NATO and national M&S capabilities); and *doctrine development, standards and interoperability*.¹⁴⁴

In this complex endeavour, the collaboration with academia and industry enables collaborative work to leverage the expertise of each community; in this respect, M&S COE acts as a catalyst for transformation through the involvement of NATO, governments, academia, industry, operational and training entities, by improving the networking of NATO and nationally owned M&S systems, the cooperation between Nations and organizations through the sharing of M&S information and developments and serving as an international source of expertise for transformation in the related domain.¹⁴⁵

¹⁴²<http://www.mpcoe.org/index.php/ct-menu-item-7>

¹⁴³NATO Military Police Centre of Excellence/ Education & Training, *2016 Course Catalogue*, v. 1.1, Bydgoszcz, Poland, in <http://www.mpcoe.org/index.php/ct-menu-item-7>

¹⁴⁴<https://www.mscoe.org/organization/mission-and-vision.html>

¹⁴⁵<https://www.mscoe.org/educational-and-training/nato-m-s-basic-course.html>

20) Mountain Warfare (MW) COE

Location: Poljče, Slovenia

Accreditation: 2015

Framework Nation: Slovenia

Participating Nations: Croatia, Germany, Italy, Austria



The MW COE is built on the framework of the Slovenian Military Mountain School¹⁴⁶, having as mission to assist NATO member countries, partners, other countries and international organizations in order to enhance mountain warfare capabilities through the following core areas: doctrine and tactics; concept development and experimentation; lessons learned process; education and training; and support to capability development.¹⁴⁷

21) Naval Mine Warfare (NMW) COE

Location: Oostende, Belgium

Accreditation: 2006

Framework Nations: Belgium and the Netherlands

Participating Nations: -



NMW COE (EGUERMIN¹⁴⁸) has a long tradition, since 1965, in the education of Naval Mine Warfare, as it started as a Belgian-Netherlands school, later opened to other NATO members, and finally accredited as NATO COE in 2006.

The mission of NMW COE is to provide subject matter expertise in the field of Naval Mine Warfare (primarily on education and training), in support of NATO transformation efforts.¹⁴⁹ It also acts as Mine Counter-Measures (MCM) technical advisor to Allied Command Operations and assists NATO's Operational Commands in NMW issues.

In order to achieve its objectives in support of NATO, NMW COE works in close cooperation with the Maritime Warfare Centre department Naval Mine Warfare¹⁵⁰, a Belgian and Dutch institution dedicated to the improvement of readiness and preparedness of both navies MCM units by providing a broad package of products to the Belgian and Dutch Navy¹⁵¹.

22) NATO Stability Policing (SP) COE

Location: Vicenza, Italy

Accreditation: 2015

Framework Nation: Italy

Participating Nations: Italy, Czech Republic, France, Nederland, Poland, Romania, Spain, Turkey



¹⁴⁶https://en.wikipedia.org/wiki/Multinational_Centre_of_Excellence_for_Mountain_Warfare

¹⁴⁷<http://www.mwcoe.org/?subpageid=52>

¹⁴⁸EGUERMIN stands for Ecole de Guerre des Mines

¹⁴⁹<http://www.eguermin.org/welcome/centre-of-excellence/naval-mine-warfare-coes-mission/>

¹⁵⁰<http://www.eguermin.org/welcome/maritime-warfare-centre/>

¹⁵¹National Doctrine Development & Standardization; Operational Analysis & Lessons Identified, Best Practices and Lessons Learned; Concept Development & Experimentation for Belgian and Netherlands Defence; Support the development of Education & Training in NMW

The concept of military forces performing police duties (NATO Multinational Specialized Unit - MSU) to cover a “security gap” in stability operations, emerging from NATO lessons learned in Bosnia and Herzegovina, has evolved to the current concept of Stability Policing (SP) and the establishment of NATO SP COE¹⁵², an organization which assumed to be an internationally recognized focal point and a hub of expertise for a Community of Interest in the field of SP.

The SP COE future orientation is to be a front runner in supporting the Alliance stability and reconstruction efforts in conflict and post-conflict scenarios, providing services and products in functional areas of doctrine and standardization (supported by concept development attributes), education and training (using mobile education and training team (METT) in conducting SP courses, tailor made courses and seminars on locations as requested, or supporting NATO collective training and exercises).

23) Strategic Communications (StratCom) COE

Location: Riga, Latvia

Accreditation: 2014

Framework Nation: Latvia

Participating Nations: Estonia, Italy, Poland, Germany, Lithuania, UK



Evolved from a Latvian national institution, the NATO StratCom COE became the twentieth accredited COE contributing to NATO by developing improved strategic communications capabilities within the Alliance.

The StratCom COE is involved in doctrine development and harmonization, conducting research and experimentation, identifying lessons learned from applied StratCom during operations, and enhancing training and education. It also operates as a debate and research forum for various StratCom disciplines: public diplomacy, public affairs, military public affairs, information operations and psychological operations.¹⁵³

Through its website, the COE offers to the interested public numerous publications in the StratCom area, as well as excerpts from different research and academic events on this topic.

24) Counter Intelligence (CI) COE

Location: Kraków, Poland

Accreditation: in process

Framework Nations: Poland and Slovakia

Participating Nations: Croatia, Czech Republic, Germany, Hungary, Italy, Lithuania, Romania, Slovenia



The most recently accredited NATO COE, having its Memoranda of Understanding (MOU) Signing Ceremony held in Norfolk on 29 September 2015, the CI COE assumes the position as the primary hub of NATO expertise in military counter-intelligence, aiming to expand the capabilities of the Alliance and its member nations to enhance NATO counter-intelligence and improve interoperability.

¹⁵²<http://www.nspcoe.org/about-us/history/nato-sp-coe>

¹⁵³<http://www.stratcomcoe.org/history>

The Centre ambition is to support the development, promotion and implementation of new policies, concepts, strategies and doctrine for CI.

3.3.3 An analytical perspective regarding NATO Centres of Excellence

The Supreme Allied Commander Transformation, General Denis Mercier, underlined in the preamble of the Transformation Network Branch's 2016 COE Catalogue that the expertise available and cost effectiveness to Allies place COEs as critical enablers towards NATO efforts to prepare for the future operating environment, setting up the Alliance posture's foundation based on six focus areas: command and control, logistics and sustainment, collective training, partnership, manpower, and capabilities.

COEs are active contributors and key facilitators to increase NATO's *strategic awareness*, *security networking*, *operational alertness*, *institutional resilience* and *strategic communication*, which are the five strategic military perspectives addressed in the Framework for Future Alliance Operations (FFAO, 2015).

The makeup and characteristics of the COEs are unique to each one, counting on setting-up and institutional evolution until the actual position, or their relevance depicted by the degree of involvement in answering different transformation requirements; the accreditation circumstances, nations involved, functioning concept, mission and vision, working network, transparency and openness, services and products, or institutional features that characterize an organization as system, offer useful analytical figures contributing to a better understanding of the whole phenomenon.

The number of NATO COEs has consistently evolved in the last years (figure 15), with an approximated total manning of 1139 billets (877 filled)¹⁵⁴ for the 23 accredited COEs (as of NATO COE Catalogue 2016).

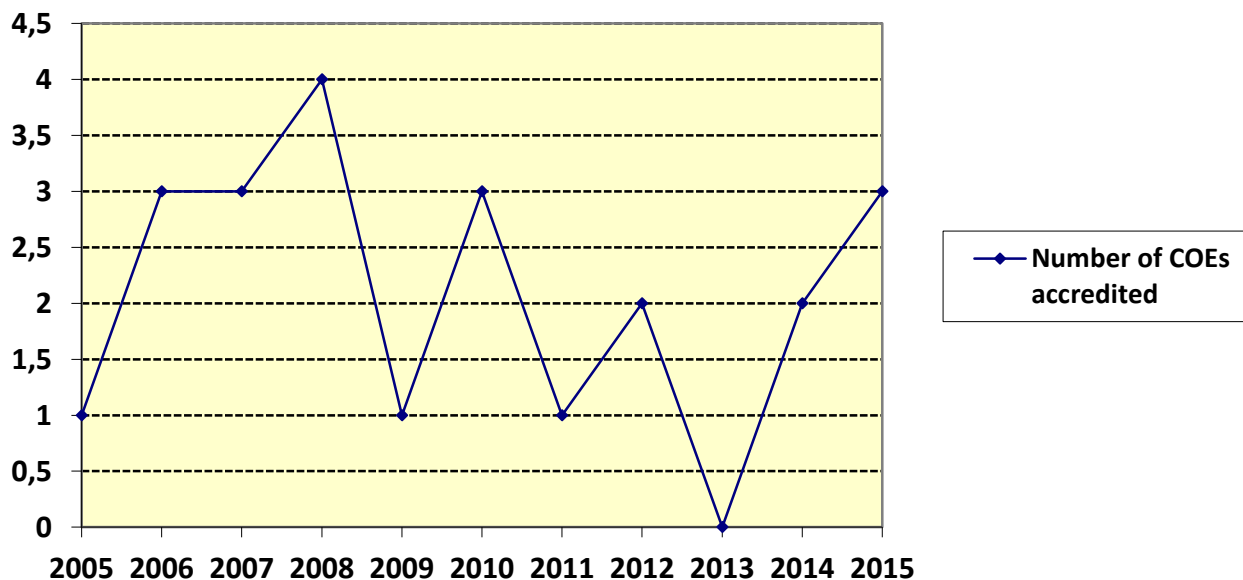


Figure 15 The evolution of the NATO COEs' accreditation rate/ year

¹⁵⁴ Independently, the manning of a COE varies from 4 to 95 posts, with operating costs per position from 6 to 25.000 € (NATO COE Catalogue 2016).

Hosting a COE as framework nation, or participating into/ contributing to a COE, beside the assumed obligations (financial contribution, human resources, or other type of support) has to rely on a well-founded decision, based on clear interest, vision, and sustainability. Tangible return of the investment is represented by a series of pragmatic benefits:

- international and NATO-wide visibility;
- building bilateral/ multilateral relationship among participating nations;
- post-deployment exploitation of multi-national skills gained by the appointed national experts;
- risk reduction during development and implementation of projects due to the multi-national approach of the COE;
- direct access to latest developments in the functional area and to the COE's services/ products;
- enabling national vision and pushing specific interests into the COE's services and products, with potential impact at the Alliance's level;
- shared development of policies, doctrines and concepts including experimentation and testing; best practices and lessons learned from nations are incorporated into all products, leading to enhanced project development;
- inherent interoperability in multiple functional areas of a discipline;
- promotion and development of national projects and programmes with a consistent support of the COE;
- sharing costs – possibility to reduce investment costs by gaining similar results with other Nations being part of the same activities;
- ensuring an entry point into the entire COEs network and the associated communities of interest, international organizations, academia and industry, sometimes difficult to establish in a purely National or NATO environment.

The analysis of the NATO Nations' involvement as framework or sponsoring nations for COEs is based on a series of quantitative and qualitative factors – e.g. the amplitude of implication (figure 16) and the evolution of Nations' involvement in time (figure 17), the interest on hosting COEs (figure 19), or specific focus toward certain capabilities/ functional areas (figure 20), also recording trends of these indicators.

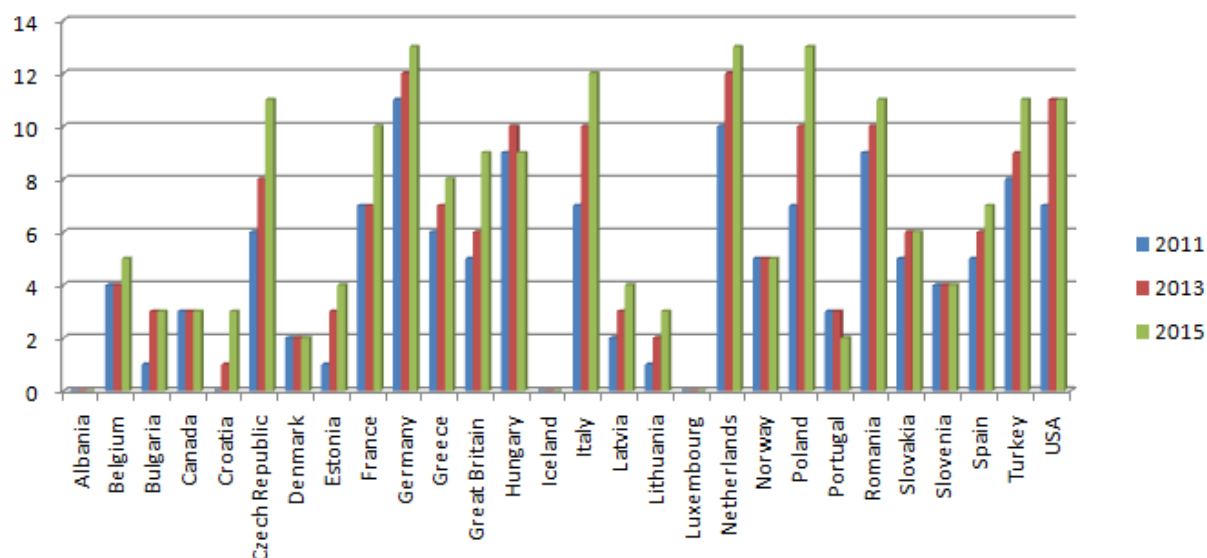


Figure 16 NATO Nations involvement in COEs by functional areas (situation as of December 2015)

COEs count 1 to 13 Sponsoring Nations from the 25 – out of the 28 NATO nations – participating in these organizations; in some cases, NATO partner nations (Austria, Finland, Georgia, Sweden) are also involved as participating nations, augmenting the total number of participants into a COE.

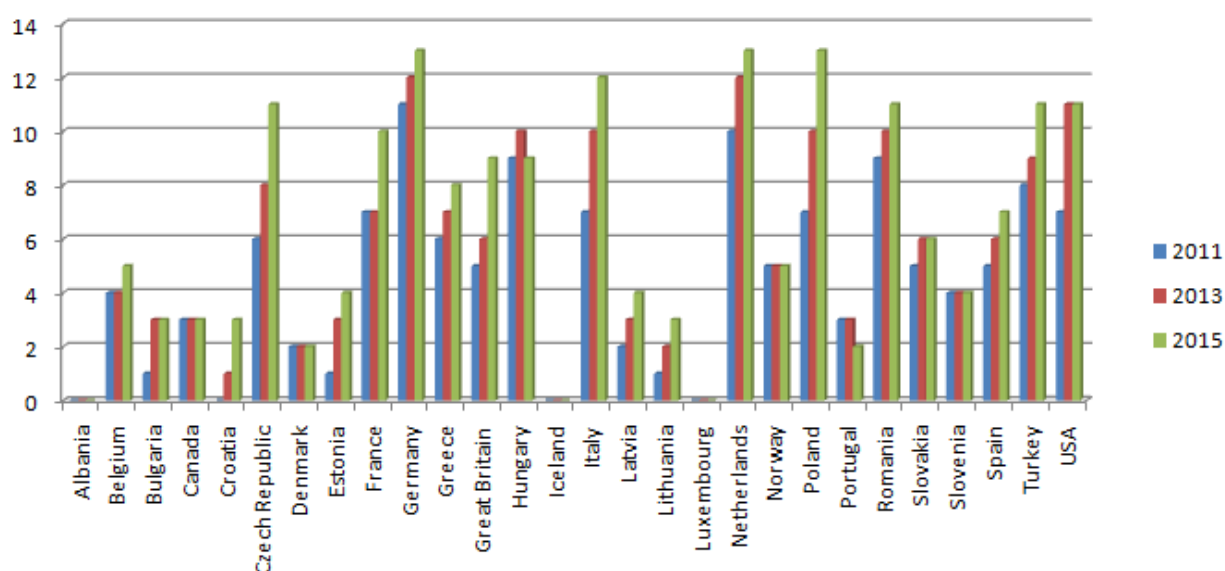


Figure 17 Trends in NATO Nations involvement in COEs– comparative situation 2011-2013-2015

As of Figure 17, six nations (Czech Republic, France, Great Britain, Italy, Poland, and Turkey) have registered a quantum leap in their involvement in the last two years, having Italy and Poland entering the top four participating nations (next to Netherlands and Germany) that counts a total ratio of 28% out of the total number of registered states (figure 18).

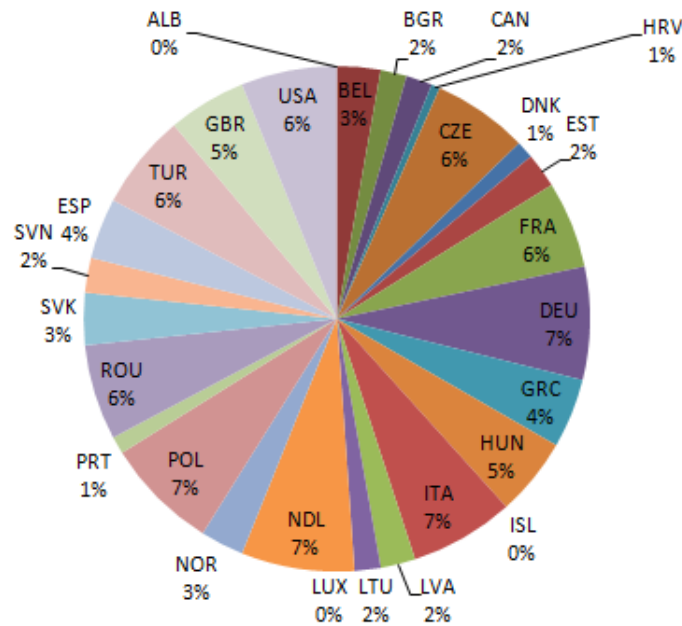


Figure 18 The engagement ratio of NATO member states within the COEs network (as of December 2015)

Germany and Netherlands have proven a strong commitment both in hosting and participating in NATO COEs, a framework that equally encourages performance and constructive competition, as a logical consequence of the international prestige of the two nations, landmarked by the economic power of Germany and the Netherlands' recognized source of expertise.

Germany is the absolute champion as Framework Nation for five COEs, followed by Netherlands with three (figure 19), while other three nations (Slovakia, Poland, and Italy) are registered each with two COEs (Slovakia and Poland are common Framework Nations for the CI COE).



Figure 19 NATO Nations engagement as Framework Nation for COEs (as of December 2015)

The large level of involvement and the interest on leveraging national expertise in different fields of military capabilities in support of NATO (with 19 NATO Nations hosting at list one COE¹⁵⁵) is a clear proof of cohesion and willingness to support the Alliance's objectives.

From the nine NATO Nations not hosting COEs we look forward with interest for the future approach of Great Britain (manifesting an increased interest¹⁵⁶ after a period of contemplation and weighing priorities), Greece (with a significant contribution in 8 COEs), and Croatia (recently acceded in NATO, and already present in 3 COEs).

¹⁵⁵ there are several overlaps on NATO Member States as Framework Nations for COEs

¹⁵⁶ currently having experts deployed in 9 COEs

Canada keeps a limited presence in COEs, but actively supports different initiatives in various NATO fora; however, Canadian scholars are critical towards what is considered a neglecting of NATO's knowledge dynamic. Moreover, not hosting any NATO COE (in spite of disadvantaging geographical location) is a missed opportunity to attract investment in Canadian defence research and build on Canada's reputation in a particular field of interest to NATO (where Peace Support Operations is seen as the most suitable option for the "soft power" profile of Canada) (Pryce, 2015).

Poland is in the top of the central and eastern Allied Nations (getting involved in 13 COEs), probably part of a larger strategy to increase its military relevance and expertise in NATO in a specifically threatening environment (associated with the proximity to Russia). Poland is closely followed by Romania and Czech Republic, two nations that responsibly assumed a pro-active presence in NATO environments. At the same level of representation, Turkey confirms alongside Romania the interest on contributing to NATO transformation from their role of stability pillars in the South-Eastern flank of the Alliance and in the Black Sea region.

USA, the most important Allied Nation in terms of military power and international political presence, are a global leader in establishing/ influencing directions in global security and NATO politics. The USA have a central role in NATO, with a major contribution in concepts and doctrine development, operational procedures, capability development, technology advance and institutional resilience. In spite of an impressive worldwide presence of the USA military assets, participation in COEs – much valued by Framework Nations and Sponsoring Nations – is fairly low, not covering even half of the accredited COEs. However, the USA presence into a COE is an indicator of the strategic importance for the functional area covered, a recognition of the added value the COE is able to bring into the depth of knowledge of a particular domain and, why not, a positive sign for other Sponsor Nations seeking investment in that particular institution.

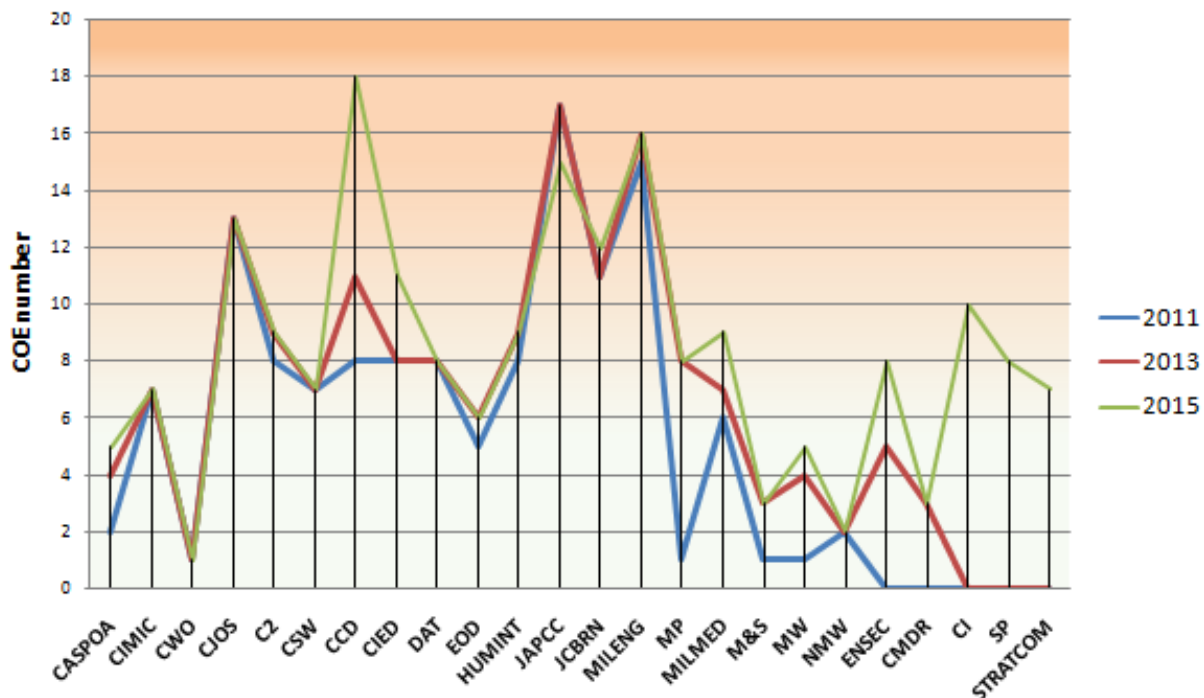


Figure 20 Number of Sponsoring Nations/ COE – comparative chart 2011 - 2013 - 2015

As of figure 20, there are several disciplines that better motivated Nations' participation – Combined Joint Operations on the Sea, Cyber Defence, Joint Air Power Competences, or Military Engineering; CCDCOE has registered the most impressive increase in number of Sponsoring Nations, notably as a proof of importance the cyber defence gained in last years, connected to specific threats.

The recently accredited Energy Security, Counter Intelligence, Stability Policing and Strategic Communication COEs register good scores of participation since the inception, as they cover functional areas that have emerged as current priorities for NATO/ Nations. It proves that importance of the establishment chronology is strongly competed by relevance of the covered topic; however, the last one is geographically/ geopolitically conditioned (e.g. by the maritime border), dependent upon the presence of a specific national capability (e.g. Air Force, submarines, Human Intelligence assets, etc.), emergent (regional) threats (e.g. terrorism, natural disasters), identification of historic vulnerabilities (e.g. the cyber domain) or deficiencies (stability policing, strategic communication) or “big” themes (as energy security).

Participation in COEs is also a matter of cooperation, where bilateral relations between Framework Nations and Sponsoring Nations ensure mutuality in their involvements.

Still, participation in a COE is tributary to available resources.

We conclude this chapter by emphasizing the vivid interest towards COEs in NATO, as long as COEs have achieved new functionalities contributing to better support of Alliance's transformation efforts, as we will show in the next chapter.

3.3.4. Emerging functional features in NATO Centres of Excellence activity

COEs are a versatile outreach tool for NATO, actively seeking involvement and more relevant contribution within the transformation pillars – doctrine and standards development, concepts development and experimentation, education and training, lessons learned and analysis.

Through the presence in (or even chairing) NATO Working Groups in their areas of expertise, developing projects within comprehensive relational networks (including NATO Agencies, NATO research, education and training facilities, Non-NATO Nations and external entities - IO, GO, NGO, industry and academia etc.), COEs are critical enablers for NATO capabilities development.

In this respect, we would briefly mark a series of top achievements of COEs in their multilateral endeavours, such as custodianship of NATO standards, leading roles of the LL/BP Communities of Interest, acquiring Quality Assurance seal and accreditation as Education and Training Facilities for NATO, or even more attaining the Department Head status for the disciplines they cover, as mark of excellence and an indicator of successful entrepreneurship.

3.3.4.1 Custodianship role in Centres of Excellence portfolio

As all the 23 accredited COEs are involved in developing NATO doctrines or other Allied Publications (covering more than 80% of Allied Joint Doctrine Architecture – level 1 and level 2 publications¹⁵⁷), the major achievement in this field of activity is covering the custodianship tasks for the NATO standards.

¹⁵⁷ as of ACT – Transformation Network Branch figures

So far, eight COEs are custodians for doctrines in their area of expertise (CIED, CIMIC, EOD, HUMINT, JAPCC, JCBRN, MILENG, MILMED), and one in his way to take over this responsibility (CCD).

The NATO Standards Custodians work within the Alliance standardization framework, being connected to a broad array of actors and following complex processes in their specific activity.

The NATO Standardization Organization charter¹⁵⁸ defines standardization as development and implementation of concepts, doctrines and procedures in order to reach and maintain the stage of compatibility, interchangeability or commonality necessary to achieve a certain level of interoperability, or optimization of the resources in the operational, technical, and administration domains.

In NATO, the Committee for Standardization (CS) is the senior NATO committee for Alliance standardization, composed primarily of representatives from all NATO countries. Operating under the authority of the North Atlantic Council (NAC), it issues policy and guidance for all NATO standardization activities¹⁵⁹.

Further, the entity responsible for initiation, harmonization, coordination and support of the standardization activity under the authority of the CS is the NATO Standardization Office (NSO). The NSO responsibilities are also directed to support approximately 120 working fora (each of them designed for a specific domain/specialty) attended by some 6,000 subject-matter experts from NATO and partner nations (Akşit, 2014, 4). In this way, the output – standardization documents – gathers elements of military theory, historical experience, or operational practice of 28 Member Nations, to which the contribution of Partner Nations is more and more relevant.

From NSO perspective, the whole standardization system is based on a solid interconnection and feedback between its components, stakeholders and final users (figure 21).

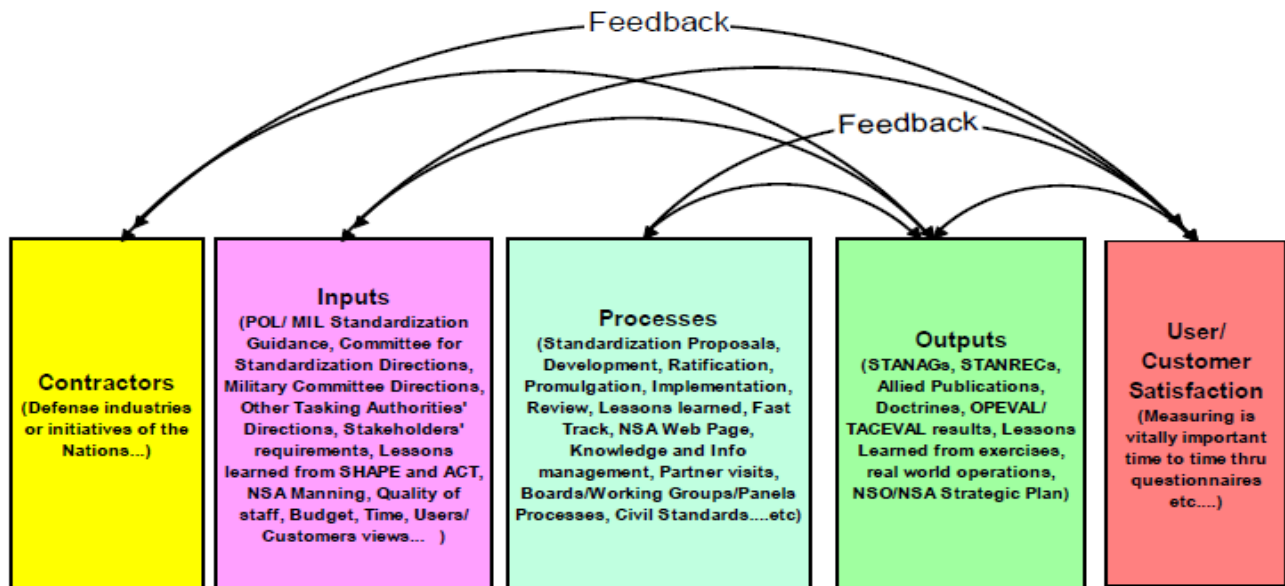


Figure 21 NATO Standardization as a system (Akşit, 2014, figure 1)

¹⁵⁸ C-M(2009)0056 NATO Standardization Organisation Charter

¹⁵⁹ http://www.nato.int/cps/en/natohq/topics_69277.htm

For COEs, as doctrine¹⁶⁰ (or other Allied Publications) custodians, the main work is directed towards maintaining the relevance and actuality of their documents by periodical reviews; the relevant input in this spectrum are counted as "top-down" and "bottom-up" requirements for change (figure 22).

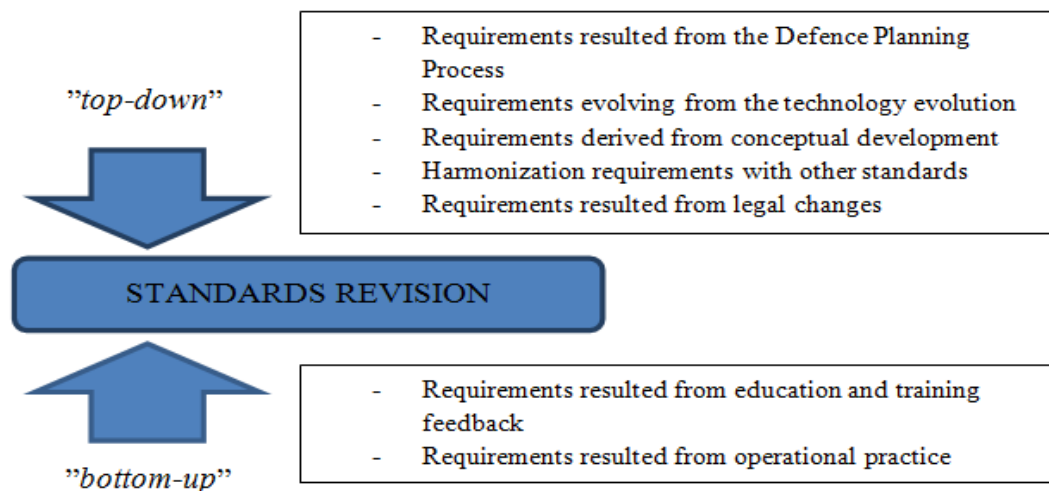


Figure 22 Influence factors in standards` revision (Kis, 2013, fig. 4)

For customers, the NATO Standardization Documents Database (NSDD) provides selectively – based on classification level – a consolidated storage of all NATO standardization documents (1,200 NATO standards are available for download to registered users; in addition, there are some 8,000 other standardization-related documents available (Akşit, 2014, 4)) and their related information, including national ratification data (figure 23). A similar approach is done for NATO terminology, which is stored and managed by the NATO Terminology Database (NATOTerm).

Figure 23 The search interface for NATO Standardization Documents Database ¹⁶¹

¹⁶⁰As of Allied Joint Doctrine AJP-01, doctrine is defined as “fundamental principles by which military forces guide their actions in support of objectives. It is authoritative, but requires judgment in application”. The principal purpose of doctrine is to provide the framework of guidance for the conduct of operations, and is about how those operations should be directed. If the doctrine describes how a force operates, the policy comes to explain why they do what they do. A doctrine is meant to be dynamic and constantly reviewed for relevance.

¹⁶¹<http://nso.nato.int/nso/nsdd/CommonList.html?runQ=no>

3.3.4.2 The Quality Assurance stance in Centres of Excellence accreditation as NATO Education and Training Facilities

NATO conducts education and training activities in order to attain three main objectives: to increase the effectiveness of NATO-led multinational forces and their interoperability, assist partner countries in their reform efforts, and support to the international peace and stability efforts in crisis-hit areas¹⁶².

The NATO education and training functions have significantly increased nowadays, registering an impressive expansion in matters of collaboration and cooperation; qualitatively, it has been reinforced through the creation of ACT¹⁶³ after the Prague Summit, in 2002, and the adoption of international standards in matter.

The introduction of new bodies and initiatives - such as COEs, Partnership Training and Education Centres, or Partnership for Peace Consortium of Defense Academies and Security Studies Institutes has also demonstrated the resolve to reinforce education and training activities for the Organization.

All the entities attached to ACT and clustered into the Transformation Network fulfil education and training functions. In this spectrum, COEs` effectiveness for NATO education and training system is double checked in terms of quality.

A first quality control on the COEs as International Military Organizations is performed by the Allied Command Transformation during the **accreditation process**, which is based on a comprehensive set of criteria that a COE must fulfill, starting with the founding papers (the COE concept, Operational and Functional Memoranda of Understanding (MoU) that draws the basic principles of COE functioning), proceeding with the mission, vision and objectives, and the alignment of the program of work to NATO priorities and requirements for support.

ACT is involved in the evaluation of a COE against a customized list of requirements, based on the Military Committee's accreditation criteria for COEs. In line with this, all COEs must act as a catalyst for NATO transformation and open activities to all Alliance members, meanwhile respecting a series of basic principles that ensures Nations' coherent effort within the Alliance, as I will detail in the next chapter.

COEs are periodically re-assessed by ACT in order to ensure that they continue to meet those criteria and assure continued NATO accreditation status.

Ultimately, the Military Committee and the North Atlantic Council must approve the initial accreditation of the COE¹⁶⁴.

Moreover, the COEs that apply for providing NATO certified education and training as NATO Education and Training Facilities (ETFs) have to proceed for supplementary accreditation, from quality assurance perspective – derived from the EU standards for higher education institutions.

A Quality Assurance (QA) system supports the overall management of an institution, increasing its autonomy, contributing to sustainability, optimization of the use of resources,

¹⁶²http://www.nato.int/cps/en/natohq/topics_49206.htm

¹⁶³ ACT holds lead responsibility for NATO and PfP joint education, individual training, and associated policy and doctrine development as well as for directing NATO schools. Since July 2012, ACT has also been given the responsibility of managing collective training and exercises based on Allied Command Operations' requirements.

¹⁶⁴http://www.nato.int/cps/ic/natohq/topics_68372.htm

improving communication and relationship within working networks, and finally enhancing the output to fit the customers` requirements.

QA in higher education achieved its modern features through the Bologna process, which evolved from strengthening the competitiveness and attractiveness of the European higher education and fostering student mobility and employability to a broader agenda, linking the undergraduate/postgraduate degree structure (including the concept of qualifications frameworks) to the concept of social dimension of higher education.¹⁶⁵

NATO found necessary a methodology aimed to reform its education system in order to increase compatibility on the services provided by different military Education and Training Facilities (ETFs), and between military and civilian education systems, meanwhile increasing competitiveness through modernization and strengthened QA.¹⁶⁶ Meanwhile, adoption of a Quality Management System (QMS)¹⁶⁷ subsidizes alignment with the required standards, the development of effective, efficient and affordable education and training solutions, and the quality of the training opportunities.

Implementation of a QA process ensures that NATO`s standards, in line with international Educational Standards, expressed in Educational Goals and derived Educational Standards are met. In this respect, NATO applied in 2012 for the European Association for Quality Assurance in Higher Education (ENQA).

ENQA provides QA guidelines and standards for European Higher Education Area (EHEA), striving to respect the fitness for purpose principle (purpose-process alignment), while observing the diversity of QA processes in national/ organizational quality assurance management systems.¹⁶⁸ Adoption of the ENQA norms and QA methodology, doubled by permanent monitoring and external certification of quality, ensures high-quality references and enhance mutual trust between high education institutions from different countries.

Further on, the **NATO Quality Standards** are found in:

- Leadership and management (including resources management). The general management refers to a long term plan constructed upon its mission and vision (considering NATO priorities as major stakeholder) and developed based on a QMS that is supported by relevant documentation and communication and IKM standards;
- Education and Training (define and deliver instruction, student assessment, support for training and learning)
- Contribution to NATO:
 - o support to NATO requirements (identified role in support of NATO, offers NATO certified courses, exploits LL to improve training, the institution`s core activities are coherent in support to NATO);
 - o support to discipline management (the institution contributes to discipline development and to maintaining NATO`s discipline framework),
 - o other NATO associated activities (contribution to capability development, standardization, LL/BP, CD&E, involvement in Smart Defence projects, etc.)

¹⁶⁵<http://www.ehea.info/article-details.aspx?ArticleId=3>

¹⁶⁶http://ec.europa.eu/education/policy/higher-education/bologna-process_en.htm

¹⁶⁷The Quality Management System standards are oriented toward: policy and procedures; staff/ instructors development; information systems and knowledge management; public information; definition and delivery of instruction; student assessment; learning resources and student support.

¹⁶⁸<http://www.enqa.eu/index.php/about-enqa/enqa-in-a-nutshell/>

The institutional accreditation by NATO ensures the alignment with the required standards and provides the seal of QA; in this respect, ETFs have to demonstrate the empowerment of an effective QMS and commitment for continuous improvement in their contribution to NATO. Upon the assessment performed by the ACT team of experts, the accreditation letter is awarded to an ETF with reference to:¹⁶⁹

- internal quality assurance systems and procedures for the assurance of quality standards;
- procedures effectively applied at each Depth of Knowledge level to ensure the quality of individual curriculum;
- effective and regular processes of reviewing the quality of programmes and the standards of curriculum, and implementing the required changes, developments and enhancements;
- accurate, complete and reliable information about the quality of the institutions programmes and the standards of its curriculum.

3.3.4.3 Department Head appointment for NATO Centres of Excellence

The NATO education and training structure and functions have been recently consolidated and optimized into the Bi-SC 75-2 Education and Training Directive (E&TD) (October 2013)¹⁷⁰ and the new NATO Education, Training, Exercises, and Evaluation (ETEE) Policy (MC 0458/3 from September 2014), where the Department Head (DH) attributes are detailed to the extent of:

- leading, conducting and approving the Training Needs Analysis (TNA), supported by JFT and the Requirements Authority (RA);
- translating the operational requirements into education and training within a subject, programme, module and/or course, and applying the educational standards to which the programme, modules and courses will adhere;
- recommending changes to the RA (and if necessary to Joint Force Trainer (JFT));
- leading and conducting the Annual Discipline Conference on behalf of JFT, with participation from the community of interest (RA, Subject Matter Experts (SME), E&T institutions and affiliated organizations).

A more developed set of roles for DH is included in the memoranda signed by appointed DHs with the HQ SACT representative (the JFT head), usually including:¹⁷¹

- coordination and collaboration with DH Coordinator (DHC) for managing the discipline E&T, including delivery of E&T solutions with designated facilities;¹⁷²

¹⁶⁹ HQ SACT formal letter, *Quality Assurance Unconditional Accreditation for Human Intelligence Centre of Excellence*, 15 October 2013

¹⁷⁰ Within the hierarchy of NATO's E&T directives, Bi-SC 75-2 subordinates: Bi-SC 75-7 Education and Individual Training Directive, Bi-SC 75-3 Collective Training and Exercise Directive, and Bi-SC 80-6 Lessons Learned Directive.

¹⁷¹ The example is a generalization of DCOS SACT, HCOE, *Memorandum of Agreement between NATO HUMINT COE and Headquarters Supreme Allied Command Transformation concerning The Appointment of NATO Human Intelligence Centre of Excellence as the Department Head for Human Intelligence Education and Training*, 02 September 2015

¹⁷² In the process of certification of education and training solutions (courses) provided by Education and Training Facilities (ETFs), the DH is in charge to determine the compliance of the content with NATO doctrines/ STANAGs, while the RA checks the responsiveness toward NATO requirements, and HQ SACT concludes on the quality – based on the NATO accreditation of the ETF.

- lead of the TNAs required to fill discipline's E&T gaps identified in the final TRA report;
- compiling a discipline E&T programme in accordance with the requirements, nested within the broad NATO (Discipline) Programme published by the DHC on an annual basis;
- provide assistance to HQ SACT DCOS JFT with the assessment of E&T solutions;
- recommend improvements to the DHC and RA;
- organize the Annual Discipline Conference (ADC) for discipline E&T;
- participate in other programming boards, conferences and WGs as appropriate, in order to execute DH functions;
- provide analysis of discipline related lessons identified;
- provide SME support to individual and collective NATO-led training events.

The newly acquired capacity as DH may require structural and procedural adaptation inside COEs' organization, in order to better rally with NATO expectations (Simion and Kis, 2015). The table below provides an overview of COEs appointed as Department Heads for the education and training disciplines approved by the Military Committee within the NATO Global Programming¹⁷³.

DISCIPLINE	DEPARTMENT HEAD
Air Operations / Systems	CASPOA
Counter-Improvised Explosive Devices	C-IED COE
Civil Military Interaction and Civil - Military Cooperation	CCOE
Counter-Terrorism	DAT COE
Cyber Defence	HQ SACT C2DS (supported by CCD CoE & NCIA)
Energy Security	EnSec COE
Intelligence / Human Intelligence	HUMINT COE
Maritime Operations	CSW COE
Medical Support	MILMED COE
Military Engineering	MILENG COE
Military Policing	NATO MP COE
Space Support to Operations	JAPCC
Weapons of Mass Destruction / Chemical, Biological, Radioactive and Nuclear Defence	JCBRN COE

Table 2 NATO COE appointed as DH for listed disciplines/domains

3.3.4.4 Lessons Learned/Best Practice Communities of Interest

The purpose of the NATO Lessons Learned/ Best Practices capability is to learn efficiently from experience (retrieved from the own - or others' - operations, exercises, collaboration, research, experiments, etc.) and to provide validated justifications for amending the present way of action (planning, tactics, techniques, procedures, etc.) in order to improve performance for (subsequent) operations.

Although the Joint Analysis and Lessons Learned Centre (JALLC) is NATO's institution designed to perform analysis of operations, training, exercises and experiments, based on the requirements generated by both NATO strategic commands¹⁷⁴, it is almost impossible for the

¹⁷³<http://www.act.nato.int/global-programming>

¹⁷⁴http://www.jallc.nato.int/organization/mission_role_tasks.asp

JALLC staffs to cover with proper expertise all functional areas, from collection to analysis, without a thoroughly prioritization. Therefore, in the analysis projects JALLC performs, it works closely with stakeholders and subject matter experts that support all stages of the projects.

As COEs impetuously emerged as hubs of expertise in NATO, most of them using the LL/BP process to facilitate the capability development based on feedback, it was a logical option to make use of this valuable resource and to connect them with the overarching NATO Lessons Learned system directed by JALLC (JALLC, 2016, 13).

Under the leadership of HQ SACT Innovation Doctrine and Lessons Learned Branch, COE-NATO Lessons Learned Workshop provides the basis for a deeper collaboration between NATO Commands (e.g. SHAPE, HQ JFCBS, HQ JFCN, JALLC, JWC, JFTC, LANDCOM, and AIRCOM)¹⁷⁵ and COEs in order to better integrate and clearly define the COEs Lessons Learned activity within the NATO Lessons Learned process.

Based on existing capabilities and proven expertise, SACT entitles selected COEs as out of theatre coordinator of the functional area Lessons Learned. In support of this, an area dedicated to each specific Community of Interest (COI) is created in the NATO Lessons Learned Portal (NLLP)¹⁷⁶, where Nations/NATO bodies share within COIs LL/BP and proceed with further analysis and proposals for remedial actions.

In the context of the NLLP, a COI is a group of users from different organizations working on related topics and having a common interest in sharing information, lessons, and experiences for the benefit of the whole NATO community (JALLC, 2015, 4), enabling networking in order to find and share information and lessons, discuss and share solutions, and promote related events, and taking profit of multiple benefits like: solving problems, developing new capabilities, leveraging best practices, standardizing practices, institutionalizing best practices, time saving, increasing skill sets, avoiding mistakes, or creating new knowledge (JALLC, 2016, 42).

There is a total number of 13 COIs hosted on classified and/or unclassified NATO networks (JALLC, 2015, 4), from which 3 COEs¹⁷⁷ are in charge for management and coordination for their functional areas.

3.3.4.5 Centres of Excellence commitment

Centres of Excellence – one of the best examples of Smart Defence projects in NATO – are at the spearhead of NATO transformation efforts, having a lead role in most of the supporting pillars – doctrine and concept development, experimentation, education and training, or lessons learned management.

Beside the NATO requirements feeding their Programmes of Work, the establishment and coordinated work in each domain within their Communities of Interest – most often NATO Working Groups or Coordination Panels – is the necessary connection between practitioners' work and the national experts giving weight to any decision on the way to follow. Ensuring the chairmanship of such fora by COEs' top leadership (as we can count some cases in NATO – see figure 12) is, first of all, a recognition of merit, and second, an extraordinary opportunity to act in a coordinated manner toward the established objective. Therefore, this is a first strong point in a COE's activity, counted for policy, planning and direction.

¹⁷⁵<https://nllp.jallc.nato.int/lla/coellw/Pages/NATOCOELLWorkshop.aspx>

¹⁷⁶<https://nllp.jallc.nato.int/Pages/default.aspx>

¹⁷⁷<https://nllp.jallc.nato.int/cmmt/Pages/Communities.aspx>

As most of the COEs are involved in supporting standardization, custodianship of the domain's doctrine (and TTPs) is the secondly counted on the achievements' board. The concept development and experimentation dimension, which is present in the activity of all COEs, in different forms, is the hardest to be quantified, as all outcomes bear value and provide contribution to the discipline advance.

Education and training are key agents for transformation; in this realm, the principal role of COEs is to provide high-quality education and training to the Euro-Atlantic community. In this respect, institutional accreditation and the Quality Assurance seal are of paramount importance. A further step is the appointment as Department Head for an education and training (sub)discipline, which offers the quality control attributes over the content of E&T products offered by multiple facilities. In education and training management, this is the top position a COE can fulfil.

A positive Lessons Learned mindset across an organization is extremely important, governing the success of real learning, sustained improvement, and profitable knowledge-sharing among the Allies. The Lessons Learned process closes the feedback cycle of providing actualized and adapted knowledge (in doctrines, procedures, etc.), which is further on transferred to customers within the education and training events. The major involvement of COEs in this domain is to support NATO LL/BP collection efforts in a specific functional area and assure subject matter expert support in the analysis phase; coordination of a specific LL/BP Community of Interest comes as a natural evolution and is counted as an institutional major success.

Figure 24 graphically depicts the level of COEs' achievements/ involvements in the transformation support spectrum¹⁷⁸.

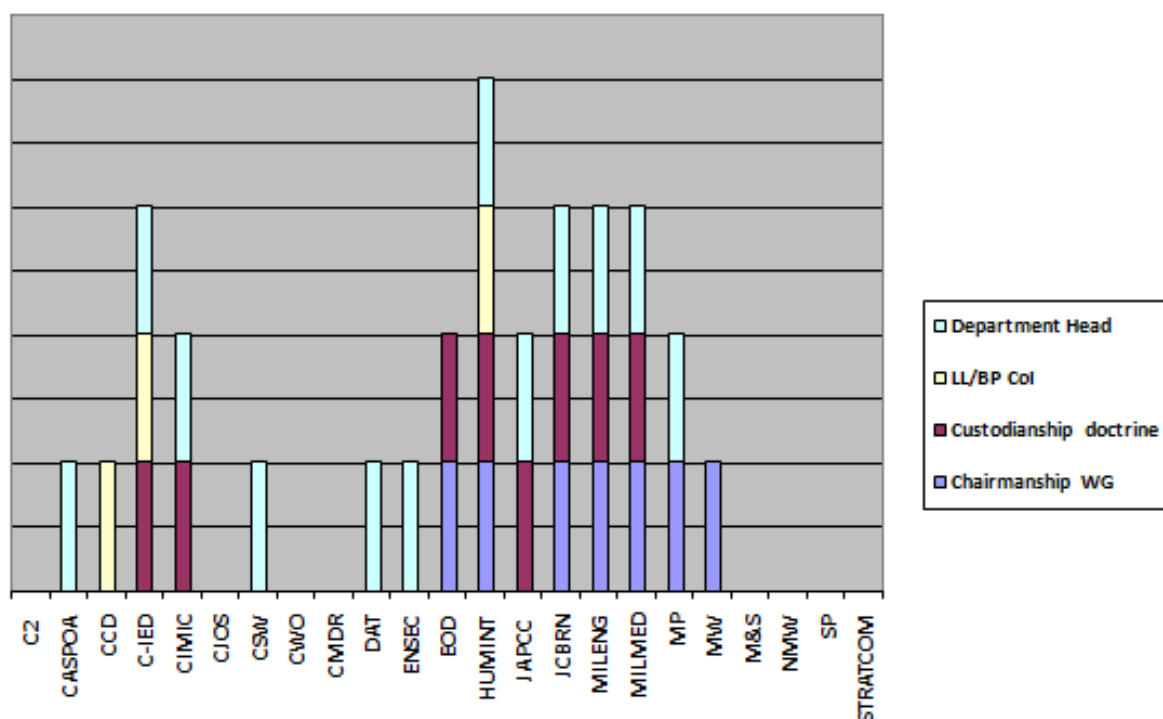


Figure 24 COEs' levels of performance in support of NATO transformation pillars

¹⁷⁸ Chart data is based on available information retrieved from COEs' webpages, Transformation Network Branch, and JALLC

From the chart above, we can acknowledge significant differences among COEs; while praising performance, we recognize a series of factors behind the scene, which can limit a COE's performance:

- internal factors: limited functional area covered by the COE Concept; the leadership vision de-coupled from a certain development direction; a functional management not connected to NATO trends; missing expertise/ training/ outsourcing; lack of resources; lack of feedback (LL/BP); prioritization; institutional resilience;
- external factors: national political (lack of) willingness; absence of NATO Policy for a certain discipline; focus on an emergent discipline, not consolidated; absence of NATO dedicated discussion fora (working groups, panels); deficient networking; strategic prioritization.

However, strong leadership support and commitment, collaboration with experienced partners, verified internal processes and - above everything - institutional motivation are part of the performance menu that has to be applied in any COE.

4. THE NATO HUMINT CENTRE OF EXCELLENCE FROM ORADEA – VIEWS OF INSTITUTIONAL INTEGRATION OPPORTUNITIES

4.1 Premises for establishment the NATO HUMINT Centre of Excellence

Some of the target fields of transformation in NATO are, as set out by the TNB website, the conceptual development and experimentation, the military information, the training as concerns the standard NATO doctrine and procedures, as well as the options of assuring the research and the integration of future concepts.¹⁷⁹

However, if the mainstream transformation channel is recognized by the product (enhanced and tailored capabilities, interoperability, etc.) the focus is always evolving, as the responses to the emerging security challenges does, and has to address the desired effects.

Based on the NATO posture, shaped at strategic level, a smooth organizational resilience is required to mirror challenges in the effort to preserve the credibility and efficiency of the Alliance. In this respect, Centres of Excellence are the answer perfectly fit for purpose, providing the most effective solutions to overcome shortfalls and advance innovation in support of functional areas, capability development, education and training, and partnerships.

4.1.1 Fields of transformation– between emergence and necessity

We are interested in these aspects as basis of the development of the specific capabilities within NATO (by the contribution of Member Nations) as part of the transformation process. Rather than constituting a simple group of forces and means provided to the Alliance, the capability in a certain domain implies a theoretical basis of reference – concept, policy, doctrine and procedures pertaining to the field, as well as interoperable forces which can put them in practice, based on a mandate.

Thus, the two vectors of transformation – on one part, the planning process (vector of top-down transformation) and on the other part, the lessons learned and the good practices resulted from concrete actions – operations, exercises, experience gathered during the functional processes (top-down change generators) determine the shaping of some pragmatic necessities to which they have to correspond efficiently and timely. Hence, it results as necessity the implementation of sufficient and necessary conditions in order to allow the development of the

¹⁷⁹https://transnet.act.nato.int/WISE/Transformal/index_html

capabilities targeted so that they correspond to the vision and intention of decisional factors (political-military), as well as to the operative and tactical necessities of the forces deployed.

The NATO Centres of Excellence, as a whole, meet these necessities (disposing, in this respect, of the necessary means and expertise), their establishment being supported in important domains, needing additional energies so that NATO defines/develops some new dimensions.

Such a domain, whose development was considered necessary from the perspective of the asymmetrical conflicts, specific for the beginning of the century, is the collection of information from human sources. In the process of defining the main parameters of this capability of NATO, a major role was the one played by the NATO HUMINT Group, an entity gathering specialist of the Allied nations interested to develop this field, as well as the branch representatives of the strategic commands of the Alliance.

Furthermore, it was underlined the need of existence of an organization capable to provide the Alliance a structured support in the field, with dimensions corresponding to the wide range covered by the pillars of transformation – analysis and lessons learned, doctrine and standardization, conceptual development and experimentation, education and training. Such an organization fits perfectly in the legal framework established for the Centres of Excellence by means of the documents: MCM 236-03 (Concept of Military Committee for NATO Centres of Excellence, of 4th December 2003) and IMSM 0416-04 (Accreditation criteria for NATO Centres of Excellence, 11th June 2004).

4.1.2. Military intelligence – operational concepts. Intelligence from human sources

The Oxford Dictionary defines *intelligence* as “*information, especially of military value*” (Hornby, 1999, 620), but this explanation is only partially satisfactory as relevance in marking the difference between the raw, non-processed information (initial data) and the information resulted after the process referred to, in specialized language, as “*cycle of information*” (figure 25).

In NATO, intelligence is defined as “*product resulting from the directed collection and processing of information regarding the environment and the capabilities and intentions of actors, in order to identify threats and offer opportunities for exploitation by decision-makers.*”¹⁸⁰



Figure 25 The Intelligence cycle¹⁸¹

¹⁸⁰(AAP-6, NATO Glossary of Terms and Definitions, edition 2015, 2-I-6)

¹⁸¹<http://www.globalsecurity.org/military/library/policy/army/accp/is3002/ltn1.htm>

According to NATO terminology, the intelligence cycle (Figure 25) is “the sequence of activities whereby information is obtained, assembled, converted into intelligence and made available to users. This sequence comprises the following four phases:

- a. Direction - determination of intelligence requirements, planning the collection effort, issuance of orders and requests to collection agencies and maintenance of a continuous check on the productivity of such agencies.
- b. Collection - the exploitation of sources by collection agencies and the delivery of the information obtained to the appropriate processing unit for use in the production of intelligence.
- c. Processing - the conversion of information into intelligence through collation, evaluation, analysis, integration and interpretation.
- d. Dissemination - the timely conveyance of intelligence, in an appropriate form and by any suitable means, to those who need it.”¹⁸²

The military intelligence is approached at strategic, operational and tactical level. If at the strategic level, it refers to capabilities, vulnerabilities and probable courses of action of other nations (entities), at operational level, it is necessary for the planning and management process to organize a campaign in a theatre of operations, while at tactical level, it supports the decisions necessary to tactical operations, being focused on the operational environment and specific threats¹⁸³.

The sources for primary data and intelligence collection are multiple, being grouped as follows: HUMINT¹⁸⁴ (Human Intelligence – data and information collected from people, on the field), GEOINT (Geospatial Intelligence – geospatial data and information registered by means of satellites, aerial photogrammetry¹⁸⁵, maps and data on field), MASINT (Measurement and Signature Intelligence – data resulted from the analysis of the results of measurements and electronic signatures), OSINT (Open Source Intelligence – information resulted from the analysis of open, public sources), SIGINT (Signals Intelligence – based on data collected by intercepting the radio and electronic signals), TECHINT (Technical Intelligence – information resulted from the analysis of the weapons and equipment used by the armed forces of other nations), FININT (Financial Intelligence – information resulted from the analysis of the financial transactions, etc.)¹⁸⁶.

We delimitate, at a conceptual level, HUMINT as a process of primary intelligence and data *collection and processing*, on one hand, while on the other, as being the *product* (intelligence) of this process.

A first observation related to the information from the human sources implies the level of reference which includes the specific needs of the (NATO) military forces deployed in a theatre of operations, which covers mainly the operative and tactical levels¹⁸⁷.

¹⁸²(AAP-6, NATO Glossary of Terms and Definitions, edition 2015, 2-I-6)

¹⁸³<http://www.fas.org/irp/doddir/army/miotc/ttbaxx01.htm>

¹⁸⁴ NATO definition for HUMINT is: “*Intelligence derived from information collected by human operators and primarily provided by human sources*” (HUMINT Definition – Terminology Tracking Form 2008-0007)

¹⁸⁵ these two sources underlie the name IMINT / Imagery Intelligence (information resulted from the analysis of the satellite images and of the aerial photographs)

¹⁸⁶http://en.wikipedia.org/wiki/List_of_intelligence_gathering_disciplines

¹⁸⁷ More details on HUMINT, pointing out mainly the strategic level and mentioning that the author deals with the issue from the perspective of the “civil” secrete services are to be found by reading (Petrescu, 2007, 167-218)

From this point of view, the assimilation of the activity of data and intelligence collection from human sources with the espionage is hazardous¹⁸⁸, this assertion being also supported by the concrete conditions of performing these actions during the operations of the Alliance, existing the requirements to frame them in the limits imposed by the international legislation and the rules specific to the law of war.

This fact does not exclude a level of classification of specific doctrine and procedures which restrict the access of the general public, from reasons that may be easily understood. At the same time, NATO HUMINT Doctrine establishes general principles meant to guide the specific activity of the Allied Nations in this field, the range of activities included by HUMINT and the requirements linked to each specific activity, related to the operational needs, starting from the goal of standardization to the end of obtaining the interoperability of the forces provided by nations. Based on the national legal restrictions, the armed forces of different states may engage limitedly in executing actions specific to this branch.

The above-mentioned stipulations are also met in the relational plan of the NATO Centre of Excellence located in Oradea, limiting the interaction in the specific field of expertise at the level of HUMINT Community of Interest within the Alliance. Still, the institution is not isolated from the civil environment, actively developing and participating to projects open to general public, becoming a promoter of NATO security culture and aiming to spread its presence in the academic community by enhancing the human potential it has. But all these aspects will be broadly tackled in a different chapter.

4.1.3. Why Romania? The establishment of NATO HUMINT Centre of Excellence – between geopolitical option and functional enablers

As T. Wedge stated, the idea of setting up a Centre of Excellence may come from two directions: NATO (as a result of having identified shortfalls among the capabilities it possesses) or one of the Allied Nations (as a result of initiatives taken at tactical, operational, strategic or even political level) (Wedge, 2011). In any of the situations, the support between the two entities – NATO and the Framework Nation (nations) – has to be mutual, and the initiative must reunite more nations willing to participate to the project.

As for NATO HUMINT Centre of Excellence, the area of reference was considered to be a specific one; the NATO Military Authorities Intelligence Coordination Group (NMAICG), identified deficiencies in the creation of a HUMINT functional capability within NATO, and pushed for a coherent and structured approach from the Allied Nations.

At that date, the Romanian Army had already formed an experienced staff, as a result of the common work with NATO military structures in different theatre of operations (Kosovo, Bosnia, Iraq and Afghanistan) and benefitting from the services of the General Directorate for Defense Intelligence (GDDI), a structure which stood out by vision and flexibility in prefiguring

¹⁸⁸ National media and the foreign one characterized the NATO HUMINT Centre of Excellence as “NATO School of Spies” or “Centre of espionage”, starting with, first of all, a lack of correct information regarding the range of actions implied by HUMINT in NATO, but also due to its tendency towards the sensational, capable of ensuring the interest of the general public for this topic (<http://www.gandaculdecOLORADO.com/america/4-america/1218-coala-secret-de-spioni-nato-din-romania>; http://www.adevarul.ro/locale/oradea/oradea-adevarul-de-seara-nato-spioni-eduard-simion-luciano-zapatta-humint_0_226177558.html; <http://www.ziuaveche.ro/top-secret/armata-2/nato-inaugureaza-un-centru-de-spionaj-la-oradea-8759.html>; <http://www.lefigaro.fr/international/2010/05/05/01003-20100505ARTFIG00612-les-eleves-espions-de-l-otan-font-leur-nid-en-transylvanie.php>)

and forming several national specific capabilities, manifesting an active presence within the coordination groups and lucrative steps in the field of military intelligence in NATO¹⁸⁹.

The performances obtained, the recognized professionalism, the interest and the determination proven by GDDI and the subordinated structures in HUMINT field justified Romania's commitment of becoming a framework nation of a NATO Centre of Excellence having as its object of activity the intelligence obtained from human sources, an application approved by NATO. This step was followed by an intense process of preparing the legal basis for the establishment of the Centre¹⁹⁰, as well as the negotiation related to the participation to this project of other NATO nations.

The fundamental documents issued to this end were: the *Concept of the NATO HUMINT Centre of Excellence*, which details the mission and the tasks undertaken, as well as the vision for the development of the institution as a HUMINT transformation pillar in NATO, and the *Functional and Operational Memoranda of Understanding*, which provide the concrete mode of functioning of the Centre. They were signed by ACT, Romania and the first group of the participating nations – Greece, Slovenia, Turkey and Hungary, on 16th December 2009, at Norfolk/USA. Subsequently, notes of joining have been signed by Slovakia, Poland, Czech Republic and USA, the process being also opened for other NATO member states (Figure 26).

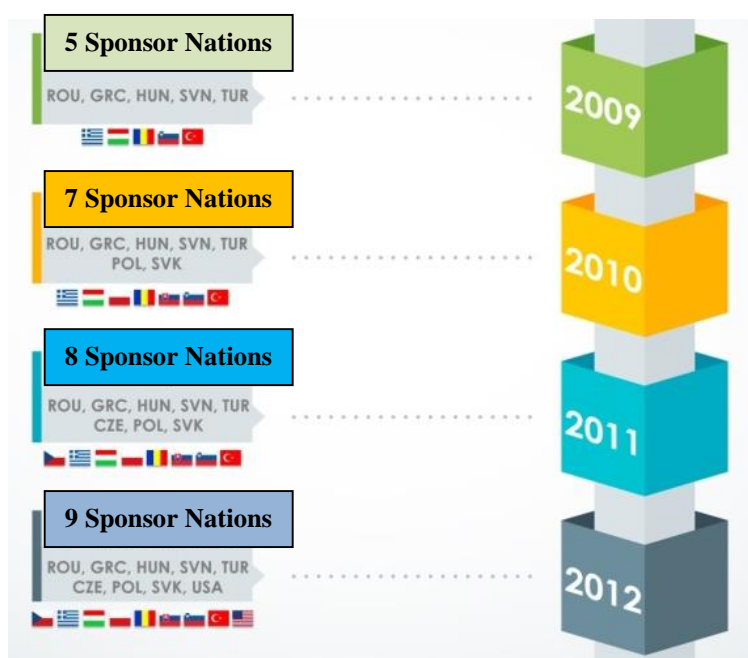


Figure 26 HCOE joining calendar

The Centre was established in Oradea, in an old barrack which was entirely renovated, the existing facilities being upgraded pursuant to the qualitative standards necessary for such an institution. Besides the existing military infrastructure, the choice of the location was also based

¹⁸⁹ Details concerning the level of involvement of GDDI in the development of the specific capabilities are set out in the anniversary edition of the publication issued by the Directorate (General Directorate for Defense Intelligence, *Infosfera* (a magazine containing security studies and defense intelligence), 1st year, no. 3/2009, Bucharest)

¹⁹⁰ Based on Decision no. 12 of 26th June 2008 of the Romanian Parliament concerning the establishment in the territory of Romania of a NATO Centre of Excellence

on a series of characteristics of the city: a relatively cosmopolite, permissive social framework, possibilities provided by an easy access (western location, existing transport infrastructure), good living conditions, possibilities of social-cultural integration for the foreign personnel.

Considering the initial operational capacity, the functional basis were set and, based on the evaluation performed by ACT commission, the Centre obtained the status of an International Military Organization (pursuant to the provisions of Paris Protocol of 1952)¹⁹¹, NATO affiliate.

The official inauguration of the Centre took place on 16th March 2010 and it was attended by the President of Romania, Traian Băsescu, the ministry of National Defense and the Chief of Staff, while ACT was represented by the second-in-command of this strategic command, Admiral Luciano Zappata.

The event was also attended by ambassadors and accredited military attachés from Bucharest, representatives of the sponsor nations, generals and officers from the Ministry of National Defense, as well as the representatives of the county and local public administration, marking the importance of the event both for the military environment and for the civil one.



Picture 2 Inauguration of NATO HUMINT Centre of Excellence of Oradea (16th March 2010). Inspecting the Guard of Honor by His Excellency President of Romania, Mr. Traian Băsescu

The inauguration ceremony was extensively covered by media, both due to the presence of the president of Romania at the ceremony of inauguration (picture 2) and for the outstanding significance of the act. There were accredited 43 journalists from 29 press trusts, TV, radio and national and local online news channels from Romania, as well as local correspondents of the Hungarian television Duna TV.

The Centre inauguration was also underlined by the international press, prestigious publications publishing the information and commenting on the importance and the significances of the establishment of the institution, as well as its role within NATO (*Courier International*, *Jane's Defence*, *Le Figaro* and others).

¹⁹¹ ***Protocol on the Status of International Military Headquarters Set up Pursuant to the North Atlantic Treaty, Paris, 28th August 1952, in <http://www.nato.int/docu/basic/txt/b520828a.htm>

4.2. NATO HUMINT Centre of Excellence - role and place in the North-Atlantic Alliance

4.2.1 Concept, mission, tasks

The mission of NATO HUMINT Centre of Excellence is to provide the highest quality services and products in response to the requirements and needs of the NATO Command Structure, NATO Forces Structure, of the NATO Nations and, when feasible, of Partner Nations.¹⁹²



Picture 3 NATOHUMINT Centre of Excellence of Oradea - main entry

In this respect, the Centre has a series of responsibilities meant to consolidate its relevance in the Alliance transformation process, ensuring it, at the same time, a central place within the HUMINT community of NATO:

- support of NATO specialized forces for the purpose of improving the processes of planning, preparation and conduct of the specific activities;
- experimentation, validation and implementation of specific concepts, techniques, tactics and procedures, based on the lessons learned in the military operations;
- support of the research activities in the area of knowledge development and the field of specific technology;
- provision of products and services in the HUMINT standardization process within NATO, to the end of ensuring a desirable level of interoperability of the national capabilities made available to the Alliance;
- ensuring the specialized educational framework for the unitary preparation of NATO HUMINT specialists.

The transposition in reality of these objectives is performed based on a program of work based on NATO requests for support and approved by the Steering Committee (decisional body

¹⁹² <http://www.natohcoe.org/hcoe-a-z/mission-and-vision/>

of the Centre), aiming to fulfill them from the perspective of the four reference pillars (corresponding to the action fields of transformation in NATO):

- analysis and lessons learned;
- concepts development and experimentation;
- doctrine and standardization;
- education and training.

Aligned to these pillars, the HCOE programme of work is ambitious in scope and covers a broad array of activities and events, being involved in all major initiatives in NATO – as is shown in the previous chapter.

From this point of view, as the HCOE Director chairs the NATO HUMINT Working Group (NHWG) and NATO HUMINT Technology Working Group (NHTWG) starting with 2011, it enables a special relation between the two working groups and HCOE, facilitating Nations' access to the HCOE pulse, a large endorsement of the NATO HUMINT Community of Interest on the resolutions taken at decision points, participation in different HCOE projects, support to the education and training events, etc.

In standardization area, HCOE ensures custodianship (since 2011) and manages periodic revisions of the Allied Joint Doctrine for HUMINT and the HUMINT TTPs, develops and supports standardization of HUMINT terminology, provides support to the development of the Intelligence Exchange Requirements and XML schema documents for HUMINT related messages (reporting forms), and produces standardization-related documents (handbooks, tutorials, studies). Nonetheless important, HCOE provides expertise support to the International Military Staff and SHAPE for the maintenance of the NATO HUMINT Policy and the ACO HUMINT Directive, respectively.

Within the framework of the Joint Intelligence Working Group (JINTWG), HCOE is active in ensuring deconfliction and support to the development of Intel-series standardization publications in NATO.

The Concept Development & Experimentation section is the lead HCOE entity for exploratory endeavours in knowledge development and technology, being involved in interdisciplinary studies meant to feed future developments of the NATO HUMINT doctrine and procedures: Human Network Analysis and Support to Targeting, threats and opportunities offered by the cyber environment, NATO HUMINT Operators Toolset prototypes, Human Aspects of the Operational Environment¹⁹³, etc. (figure 27).

¹⁹³ Under the aegis of Emerging Security Challenges Division, this project was emblematic for the cooperation openness of the HCOE. The Centre ensured the directorate of the project and the basic working Centre, cooperating with military and political experts, cultural advisers, anthropologists, sociologists, historians, communication contractors, representatives of nongovernmental organizations, etc. from abroad and from Romania. The first workshop was organized in Oradea on 6th-8th September 2011, being attended by 20 experts in the identified fields of interest representing notorious institutions and organization from different NATO and non-NATO countries: ACT Human Factors Branch; Acta Non-Verbal (Romania); Allied Rapid Reaction Corps (Great Britain); Behavioral Dynamics Institute/Royal Institute of Great Britain; Centre for Policy and Quality Standards (Afghanistan); Centre for Strategic and International Studies, USA; Defense Against Terrorism Centre of Excellence (Turkey); Graduate Institute of Development Studies, Geneva; Information Options Ltd. (Great Britain); International Security and Assistance Forces (ISAF), ISAF Joint Command; Irregular Warfare Program, USA; King's College London, Great Britain; Michigan State University, USA; Neurolinguistic Programming / NLP 101 Life, Great Britain; UN command; University of Cambridge, Great Britain; University of Duisburg – Essen, Germany; University of Leiden, the Netherlands; University of Oxford, Great Britain; Western Illinois University, USA. The purpose of the project was to provide support for a better comprehension of the characteristics of the population from the conflict areas and to ensure the basis for a possible major concept of NATO in this field. The study focuses on the strategic and

Lessons learned and analysis close the development cycle for standards, providing recommendations based on lessons identified and best practices acquired from operations and education and training events. HCOE LL section assists Joint Analysis and Lessons Learned Centre with HUMINT experts for collecting and conducting Analysis Reports in the specific area of expertise, also being involved in managing the NATO HUMINT Best Practices/Lessons Learned database.

HCOE provides individual education and training products since the beginning of its functioning, but it has registered a quantum leap in the educational process in the last years. Holding a large portfolio of courses offered to NATO (HUMINT NATO standardization-related and systems training), HCOE pursued the steps for acquiring the Quality Assurance seal as NATO Education and Training Facility (ETF).



Figure 27 Samples of HCOE projects/ editorial products

In a short period of time, a committed effort of the HCOE leadership and the experts involved in the E&T area determined the award of HCOE by the Deputy Chief of Staff JFT, on behalf of the SACT, with the Quality Assurance Unconditional Accreditation at 15 October 2013. In this respect, the accreditation letter makes reference to:¹⁹⁴

- sound internal quality assurance systems and procedures for the assurance of quality standards;

operational level, without excluding some implications at tactical level. In this respect, the following direction of analysis were considered as necessary: main motivating factors of human actions; establishing the community profile; intercultural communication; dynamic of local situation; perception and acceptance of NATO operations/missions; measurable indicators of population's attitude concerning NATO operations; Human Aspects in Operational Planning.

¹⁹⁴ HQ SACT formal letter, *Quality Assurance Unconditional Accreditation for Human Intelligence Centre of Excellence*, 15 October 2013

- procedures effectively applied at each Depth of Knowledge level to ensure the quality of individual curriculum;
- effective and regular processes of reviewing the quality of programmes and the standards of curriculum, and implementing the required changes, developments and enhancements;
- accurate, complete and reliable information about the quality of the institutions programmes and the standards of its curriculum.

HCOE is a key stakeholder of the NATO HUMINT exercise – Steadfast Indicator; it hosts and fills key positions in NATO’s annual Tier One HUMINT exercise starting with 2009.

At individual education and training level, so far, since 2010, more than 765 students from 23 Member Nations have been instructed in HCOE courses.

Based on the proved expertise and multilateral involvement in supporting the HUMINT overall development in NATO, doubled by the status of accredited NATO ETF, HCOE applied for becoming Department Head (DH) for HUMINT education and training in NATO.

The Military Committee has released his approval for this application in 29 May 2015 (through the document IMSM-0264-2015), followed by a ceremony organized at the HQ SACT in Norfolk, Virginia (USA), when HCOE officially became “Department Head for Human Intelligence Education and Training” in NATO.

The Memorandum of Agreement signed by DCOS JFT Vice Admiral (ESP N) Javier GONZALEZ-HUIX and the HCOE Director describes a series of responsibilities HCOE has to fulfill as DH, among which:¹⁹⁵

- coordination and collaboration with DH Coordinator (DHC) for managing HUMINT E&T; this includes delivery of E&T solutions with designated facilities, matching the training requirements;
- lead of the Training Needs Analysis required to fill HUMINT E&T gaps identified in the final Training Requirements Analysis report;
- compiling a HUMINT E&T programme in accordance with the requirements; this will be nested within the broad NATO Intel Training Programme published by the DHC on an annual basis;
- provide assistance to HQ SACT DCOS JFT with the assessment of E&T solutions;
- recommend improvements to the DHC and Requirements Authority;
- organize the Annual Discipline Conference (ADC) for HUMINT E&T (factually, this is included as part of the Intelligence ADC, coincided with the NATO Intelligence Training Working Group);
- participate in other programming boards, conferences and WGs as appropriate, in order to execute DH functions;
- provide analysis of HUMINT related lessons identified;
- provide SME support to individual and collective NATO-led training events.

¹⁹⁵ DCOS SACT, HCOE, *Memorandum of Agreement between NATO HUMINT COE and Headquarters Supreme Allied Command Transformation concerning The Appointment of NATO Human Intelligence Centre of Excellence as the Department Head for Human Intelligence Education and Training*, 02 September 2015

4.2.2. Functional and support relations. Perspectives of development

The HCOE leadership and staff strives to consolidate the institution position as central point of HUMINT expertise within NATO and to place it at the spearhead of all major HUMINT initiatives within the Alliance (Simion, 2014).

The organization chart (figure 28) was initially configured to properly answer all the requirements from a highly specialized perspective. Consequently, the new attribute of HCOE – DH function – led to a reconfiguration of HCOE structure.

With the recent re-negotiation of HCOE Memoranda of Understanding in 2016, among other decisions, Participating Nations agreed the setup of a dedicated office, under Dean of Academics, to deal with the DH incumbent tasks.

The permanent development, as a Quality Assurance stance, is also reflected in the human resource development strategy. Still, HCOE is the only place within NATO having under one roof a significant number of international HUMINT Subject Matter Experts (SMEs) from the Framework and Sponsoring Nations. The HCOE maintains an annual training and education plan for all its personnel to improve not only their HUMINT knowledge and skills, but also their general military and leadership skills.

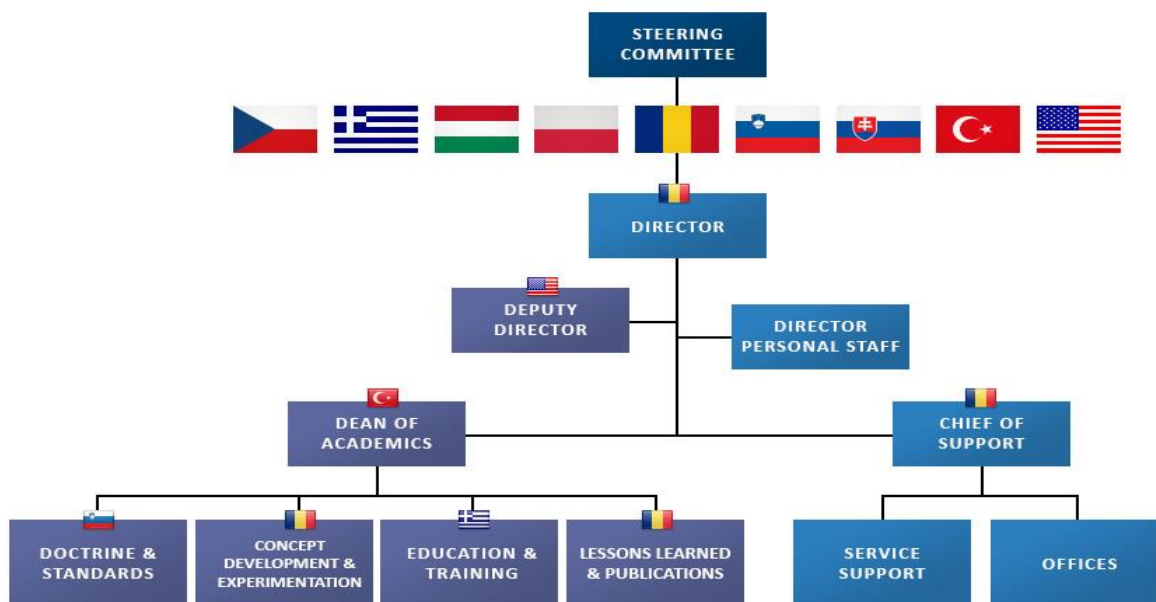


Figure 28 HCOE Organization chart¹⁹⁶

In particular, the personnel of the Centre is involved in courses, exercises, seminars, working groups, management of the standardization documents, experiments, activities of analysis, projects of scientific research, all contributing to shaping the image of a complex institution, where the energies group in a synergist way, to the end of ensuring a high qualitative level of products and services provided within the Alliance.

¹⁹⁶ <http://www.natohcoe.org/organisational-chart/>



Picture 4 HCOE Lodge

In support of these, the working spaces, classrooms, and conference halls and the gymnasium, laundry, and mess facilities permit the HCOE to conduct several international courses and activities simultaneously and to host extensive events with a capacity exceeding 260 participants.

The HCOE also has its own military range which can be used to conduct field training activities in conditions more similar to “real world” operations than a traditional classroom.

In addition, the recently built HCOE Lodge offers the option to host participants in Centre activities in conditions similar to those of commercial hotels but with prices that are at least half of those found on the commercial market.

The fact that the activity carried out by HCOE reaches a high level of excellence is decisively determined by the comprehensive network of relations

that the institution established and consolidated it in a short time, by a pro-active policy, by its willingness to commit and by the judicial prioritization of resources, being represented at level of the main decisional and action entities in the field of interest.



Picture 5 HCOE infographic – administrative and logistic support

Hence, besides the coordination structures within the Strategic Commands of the Alliance, there were established working relations, first of all, with the Allied Nations (by means of NATO working groups focused on HUMINT field, presided by the HCOE Director), with structures within the operational commands, with NATO Training Centres and with other Centres of Excellence as their activity interconnects to different levels of interest. HCOE has connections with and provide support to the Emerging Security Challenges Division – NATO HQ, the Joint Force Training Centre (JFTC), Joint Warfare Centre (JWC), Joint Analysis and Lessons Learned Centre (JALLC), NATO Special Operations HQ, NATO School Oberammergau, Joint Forces Command Naples, Joint Forces Command Brunssum, ACCI, NCIA, NATO operations HQs (KFOR, ISAF/Resolute Support), and others.

Considering that the reform and transformation processes imply vision, performance and openness, there should also be taken into account the necessity of multiplying the personnel's fields of expertise, of ensuring their access to environments which promote the challenges of ideas, it facilitates the comprehension of the security and social phenomena, and allows the multidimensional deepening of the issues of interest. The openness and inter-relation with the academic environment, the development of partnership with universities, think-thanks, research institutes, NGOs, within specific projects, ensure the premises necessary to such "acquisitions" of knowledge and know-how.

In this respect, HCOE maintains academic outreach with the US National Intelligence University, University of Oradea, Land Forces Academy, and other institutions, looking forward to develop this aspect in the current activity.



Figure 29 The NATO Information point established and maintained by HCOE at the University of Oradea Library



Figure 30 HCOE infographic promoting the NATO COE network

In order to promote NATO's values and culture of security and, on the other hand, to orientate and provide students from University of Oradea with NATO genuine reading materials (periodically updated and completed), HCOE has furnished and equipped a NATO Information Point at the University of Oradea Library (figure 29). It was inaugurated on 16 April 2014 by the HCOE Director and the pro-rector of the University, in the presence of teachers and students of the institution, officers of HCOE and media representatives.

With any occasion, HCOE representatives actively support promotion of COEs' network, their particular activity and fields of potential mutual interest with other entities, in order to encourage interaction and to further mutually beneficial cooperation (figure 30).

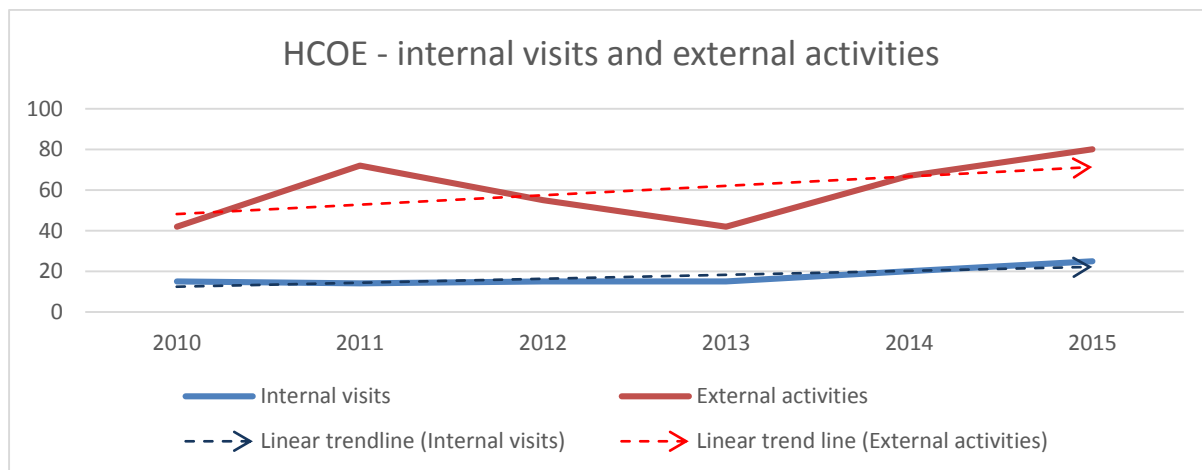


Figure 31 Trends in internal visits and external activities in HCOE

Figure 31 is illustrative for the evolution of the number of official visits paid by different stakeholders to HCOE, involving the Centre's leadership (out of the sections' activities), each of them supposing informative briefings, coordination discussions, visits to HCOE facilities, etc. – a relevant indicator for a growing interest towards HCOE, from multiple perspectives. On the other hand, the number of external activities shows a pro-active engagement of HCOE in establishing and maintaining its relevance in different communities of interest and NATO working fora, augmented by the new responsibilities and tasks assumed.

Each of the relations established have different significances, prefiguring multiple perspectives of development and institutional integration, as we will point out in the next chapter.

4.3. NATO HUMINT Centre of Excellence – perspectives of institutional integration

The institutional integration represents a real challenge for any newly-founded organization, in any reference environment. In this respect, the leadership of the institution has to manage two functional directions of integration, one belonging to the internal structure and relations, while the other one relates to the external integration in a superior functional system (or systems) (Simion, 2012).

As for the internal operation, the main references reside in a “construction” interdependent with people, processes and technologies (including working procedures). In a systems approach, the incoming materials and outcomes (resources and procedures vs. product) are also accounted for. In the end, the type of the organization and its purpose define and determine the mode of approaching the institutional analysis.

The NATO Centres of Excellence fall into the category of *intergovernmental organizations* (Evans and Newnham, 1998), being made up of participating nations (framework or host nation, sponsor nations) and benefitting from contributions of the other nations or organizations (governmental or non-governmental), depending on the area of expertise. As we have previously shown, NATO Centres of Excellence are created based on a Concept and they begin their existence in this capacity, after signing the Operational and Functional Memoranda of Understanding by the legal representatives of the parties (participating nations) and the coordinating authority, ACT.

In particular, the Centres benefit from an international legal personality as International Military Organizations, pursuant to the provisions of the *Paris Protocol on the Status of International Military Headquarters set up pursuant to the North Atlantic Treaty* (28th August 1952), their merger with the International Military Commands being made even in the conditions when the Centres are not part of the NATO Command Structure.

As concerns a classification from a functional point of view of NATO Centres of Excellence, they represent complex entities, varying in different extensions, from the status of think-tank to that of training and educational facility, operating under the umbrella of NATO. As a relevant example concerning a multilateral approach (necessary to a level of performance corresponding to excellence), NATO HUMINT Centre of Excellence carries out a full spectrum of processes meant to contribute to the activity of supporting the development of HUMINT capability: from collecting and processing the lessons identified and assimilation of good practices within the processes of analysis, development and experimentation of new concepts, transposition of the results of the analytical activity and research in policies, doctrines, procedures and, finally, the transfer of knowledge and development of abilities by means of the educational and training activity.

The organizational studies approach the entities that represent their object from different perspectives and based on different levels of analysis. Our goal is not to refer to an introspection in the philosophical history of organizations, nor to tackle issues of sociological nature or aspects specific to human resources. In exchange, we choose to focus on an empirical study of the challenges perceived at level of an emerging organization, within a specific environment. This does not mean that we eliminate any reference to the organizational cultures, understanding the issues related to leadership, institutional ethics or other basic characteristics and indicators of an organization, but only the fact that they will be addressed in a less systematic manner, in order to answer better to the intentions formulated in the preamble of the paper.

4.3.1. A general perspective of institutional integration in NATO

From the point of view of the systemic framework, we point out a first connection of the organization with the external entities. As the organizations are, generally, characterized by complex, dynamic, goal-oriented processes, we may assume that the report between “input” (internalized tasks and provision of resources) vs. “output” (product) is an important characteristic of institutional integration, both as regards the qualitative and the quantitative indicators. From this point of view, we may mark a decisive step towards the institutional integration to maximal parameters: in compliance with its instruments of incorporation, the NATO HUMINT Centre of Excellence drew up its own program of work based on the requests for support made by the Alliance, centralized by the steering structure of the Transformation Network, being at the same time open to the particular requests of the participating nations or of other beneficiaries within NATO. As what concerns the resources, all pieces of the mechanism – budget, personnel, procedures, interconnection networks, technologies etc. are clearly specified in the instruments of incorporation, as well as in the national law (considering the location of the Centre) and ensured so that they provide the necessary premises and optimal conditions to develop the specific activity.

On the other hand, in order to better understand the adjustment of the organization to the action environment, the theory of complexity provides us a perspective of the amount of strategies and structures that facilitate the integration of the “whole” (the organization itself) by accounting the connective performances of the component substructures.

Consequently, for a military organization, where the action independence of the component sub-systems is strongly limited and controlled by specific rules, it is required a proper strategy which should potentiate to the maximum the opportunities and the initiatives of the subordinated branches, their success being transposed in the success of the organization.

Assuming a sufficient flexibility at the level of management of HCOE, and a clear vision regarding the role and the future of the institution, I may assert that its substructures were directed so that they contribute, both individually and part of the joint effort, to the realization of the connection with the relevant structures of the Alliance; the organizational chart of the Centre is conceived so that it ensures a specialized connection, corresponding to the transformation pillars in NATO, with the responsible branches within the strategic and operational commands, as well as with other allied structures engaged in the development process of the Alliance military capabilities – Joint Warfare Centre (Stavanger, Norway), Joint Forces Training Centre (Bydgoszcz, Poland), Joint Analysis Lessons Learned Centre (Monsato, Portugal), etc.

From the perspective of Centre’s object of activity – HUMINT capability in NATO – one of the priority objectives of the institution is to create a community of interest in the field of HUMINT which should gather around the HCOE, interesting NATO structures, nations and other organizations and having as purpose the creation of a forum of debates and the development of the activities meant to provide the mutual information of the participants as regard the actions, the events, the significant evolutions in the field (by formal actions such as: publication of an newsletter, management of specific web page, organization of conferences and workshops, etc.).

Beyond this subject, the NATO HUMINT Centre of Intelligence stood out within the NATO Transformation Network as a pro-active organization, participating to all main events from the HUMINT field or linked to concrete aspects of its connection to the rhythm of the

Alliance, being represented during different projects¹⁹⁷, working groups and workshops, forums of coordination, standardization initiatives, etc.

Beyond the specificity of the field of expertise and of the area of interest specific to HCOE, its development as an organization based on knowledge by integrating NATO vision, policy and requirements in the management of interpreting the information, adopted and adjusted as basis of their own necessities of information exchange, represents an element of maximum importance for the complete institutional integration.

4.3.2. Local, national and regional relevance. Considerations on multispectral institutional integration (social, economic, cultural)

From the strategic point of view, the political-military decision of positioning Romania as a framework nation for the development of NATO HUMINT Centre of Excellence reflects the vision of a coherent commitment of the country concerning the security arrangements assumed once it became a member of the North Atlantic Alliance, an event with profound significances, exceeding the purely military aspects.

Considering the partnership established with other states participating to the project (including reciprocity of providing resources in partners' similar projects), it may be noted a consolidation of the bilateral relations in different domains of the broad field of security and an increase of the level of cohesion in undertaking the objectives promoted within NATO or of other regional initiatives.

At national level, the NATO HUMINT Centre of Excellence represents an authentic evidence of quality of the Romanian Army institution; HCOE's image was used (besides other relevant indicators¹⁹⁸) as argument of the importance of Romania's contribution to the Alliance efforts in the field of security, in a video material ("What NATO means for us") that was part of the Alliance¹⁹⁹ campaign of public diplomacy. This fact is just one of the many reasons that lead us to believe that the Centre will become a permanent reference on the list of accomplishments of which the Romanian Army is proud of and by which it ensures a significant position in the system of NATO capabilities.

Beyond the international reputation and political relevance that the existence of the Centre of Excellence has at national level, the implication related to the institutional integration multiplies and significantly diversify locally.

From its establishment, the Centre of Excellence from Oradea challenged the imagination of the local population (and not only). Its description as a "training Centre for NATO spies" prevailed in media²⁰⁰ – but after a relative short time, the spectacular side of this image

¹⁹⁷ It should be taken into consideration, as an example, the contribution brought in the experiment related to the development of the Counter Hybrid Threats concept– in <https://transnet.act.nato.int/WISE/CHTIPT/Newsletter/AprilNewsI/file/WFS/CHT%20Newsletter%20-%20Edition%20%20-%20final.pdf>

¹⁹⁸ Main accomplishments of the Romanian Army in relation with NATO are synthetically presented by the ministry of National Defense, Gabriel Oprea, in the article "*Army and the national interest*" published in the magazine *Infosfera*, 2nd year, no.2/2010, pages 3-8

¹⁹⁹ <http://www.mae.ro/en/node/6038>

²⁰⁰ <http://www.gandaculdecolorado.com/america/4-america/1218-coala-secret-de-spioni-nato-din-romania>; http://www.adevarul.ro/locale/oradea/oradea-adevarul_de_seara-nato-spioni-eduard_simion-luciano_zapatta-humint_0_226177558.html; <http://www.ziuaveche.ro/top-secret/armata-2/nato-inaugureaza-un-centru-de-spionaj-la-oradea-8759.html>

dissipated, while the locals understood the real significance of the NATO Centres of Excellence (and, especially, the one hosted by the city crossed by *Crișul Repede* river).

Hereinafter, I will present a series of approaches determined by the aspects related to the functional integration of the institution, locally.

First of all, in the department of service supply (without taking into account the maintenance expenditure related to the functioning of the barracks), the foreign persons having working relations with HCOE take advantage of this opportunity to visit Oradea (possibly, even the surroundings), being excellent consumers. They use high quality hotels that provide complex services, they rent cars, enjoy the recreational areas (restaurants, pubs, wellness resorts - *Băile Felix* and *I Mai*) and they visit cultural objectives.

In this respect, the Centre is permanently concerned to contribute to the correct orientation of its guests, who also become the guests of the city. As part of the working activities, the institution provides to its collaborators general presentations of the location, city and the surrounding areas, it makes recommendations related to the local specific, provides pocket maps, directs the guests depending on the intentions they express, and develops guiding activities during short tourist tours visiting the main objectives of interest. In this respect, having a rather disproportionate share of free time compared to the one dedicated to the professional activities in favor of the latter, HCOE considers the references characterized by quality and attractiveness; these features will constitute grounds to further promote, among visitors' friends, some arguments meant to make them return as tourists, accompanied by family and acquaintances.

It is obvious that there are still many things to be done as regards the act of enhancing and pointing out the cultural characteristics of the area (professional management and marketing of the tourist potential focusing on cultural objectives and events), their connection with other events, establishment of advantageous mutual partnerships with local stakeholders, development of customized packages of offers, etc.²⁰¹; I confidently look forward, in a first phase, for the availability of the "*Țării Crișurilor*" Museum, of the Military Museum, and the Fortress of Oradea (recently renovated), as well as a superior valorization of different festivals, days of commemoration, or holidays. In this respect, the partnership with the bodies of public administration, the persons responsible at an institutional level, the nongovernmental organizations would be more than useful.

An original promotion of the local dietary habits is possible when specific activities gathering a great number of persons are organized, when the food is provided by a catering service, in a way that does not imply only the simple provision of the food, but it also represents an excellence opportunity of enjoying meals specific to Romania and the Bihor County. This fact is highly appreciated by visitors, who even get to learn the names in Romanian of their favorite meals. In this respect, the partnership of the Centre with the service suppliers in the field of food represents an important integration feature in this economic department, ensuring predictability, improved relations of cooperation and a relentless quality of services, under mutually advantageous conditions.

There exists a whole series of other aspects that may be tackled from the perspective of a better local integration, both at an institutional and at a social level – considering the specific

²⁰¹ Generally, the NATO Centres of Excellence do not pay a particular attention to this aspect, but we consider that a pro-active manifestation in this respect represents not only a duty towards the community, but also an opportunity to point out the social-cultural offer of the city, which is extremely important in the evaluation of the general conditions of sending the civil personnel.

needs of the international personnel operating within the Centre. Starting with the multiculturalism of the area – an excellent framework for the adjustment of the foreign staff and of their families with a tolerant social environment, there may be addressed questions related to the capacity of the educational system (and its representation at the local level) to provide an offer truly useful from the point of view of the requirements existing on the educational market.

If the education taught in Hungarian and German is well represented, the persons responsible in the education field should also realize the need to ensure these services in English, making the education accessible to an even wider range of clients (families of the foreign investors, or of the foreign personnel working – as in the case of the Centre of Excellence, but also of the pupils and students living in Oradea who wish to develop skills that will ensure them the success of their future professional development in a world characterized by a uniformity generated by the integrationist pressures of globalization).

I conclude that the establishment of the Centre of Excellence represents a unique opportunity to promote Oradea for the outer world, in the NATO realm.

The city becomes famous by the working relations that the Centre develops with a multitude of NATO structures or national and international active organizations in the field of security and in the academic environment. Oradea (and Bihor County) is promoted on the occasion of each event hosted by the Centre, but also by the delegates of the Centre who take part to different external activities. Moreover, all references to NATO HUMINT Centre of Excellence that are made within the community of North Atlantic Alliance relate to the host city – Oradea, details about it being thus made known by presentations posted on NATO website and on the Centre's public page, all with the purpose of contributing to its international recognition.

4.3.3. “General Gheorghe Avrănescu” Association – an option for the social-cultural institutionalized integration of the staff of NATO HUMINT Centre of Excellence

“General Gheorghe Avrănescu” Association²⁰² is a legal entity governed by the private law, being an autonomous, non-profit, apolitical organization and with no union involvement²⁰³, set up and sustained by the voluntary contribution of a part of the HCOE staff.

The purpose²⁰⁴ of “General Gheorghe Avrănescu” Association consists in the promotion of the values and symbols of the Romanian Army, of its achievements along the time, paying tribute and reanimating in the citizens' conscience the feelings of deep gratitude towards the national heroes and martyrs. Likewise, the Association pursues the promotion of the cultural, sporting, recreational, educational, scientific activities and those of stimulating the professional motivation, the charity and benevolent actions among and with the support of the military and civil staff of the army.

The entire range of activities subscribed to the above-mentioned goals has a significant local accent, benefitting from the consistent support of the local and county authorities, as well as of excellent relations of cooperation with the local economic agents.

The rural tourism and the journeys in the most spectacular areas of the county, the visits at the tourist objectives, the participation to local events occasioned by historical and religious

²⁰² The name of the association honors the memory of the general Gheorghe Avrănescu, one of the Romanian heroes of the second World War (details at <http://www.worldwar2.ro/arr/?language=en&article=97>); web page of the association: <http://agga.ro>

²⁰³ Art. 2 of the Articles of Incorporation of “General Gheorghe Avrănescu” Association

²⁰⁴ Pursuant to Art. 3 of the Memorandum of Association of “General Gheorghe Avrănescu” Association

holidays, tastings of the local cuisine, sports competitions are only a few aspects defining the interest of the Association linked to the involvement of the staff of the Centre of Excellence (and occasionally, of the professional partners) for the purpose of getting know each other, of increasing the degree of cohesion and social-cultural integration.

These events are, at the same time, excellent opportunities of promoting the tourist potential of the area, of making Romania, Bihor county and city of Oradea known and appealing for the persons from our professional community.

At the same time, we wish to underline the uniqueness of this action among the Centres of Excellence and we may consider it an example as concerns the good practices concerning the act of finding some optimal solutions concerning the integration of the foreign staff.

CONCLUSIONS

A quantifiable approach of the determination in matters of security proves that the North Atlantic Alliance is one of the organizations with the greatest openness in what concerns the assumption of responsibilities in the conceptual field of security. The need of transformation²⁰⁵ of NATO is generated both by the geostrategic changes generated by moving from the unipolar to the multipolar system (or maybe the polyarchic one – Brown, 2007) and subsequently, by the search of the Alliance role in this context, but also by the emerging challenges in matters of security.

At the Alliance level, the transformation consists in fact in a series of initiatives progressively launched and which develop further (Bell, 2005), in correlation and mutually influencing with the process of reforming of other relevant organizations in the field of security. The NATO transformation was positively influenced by the development of the European Security and Defense Policy; simultaneously, the future form and effectiveness of the United Nations are important for NATO as the UN mandate represents, many times, a precondition so that many other European allies to take into consideration the use of force (Riecke, 2005).

As we have stated in the first part of the paper (the chapter regarding the state of knowledge in the field of transformation in NATO and of NATO Centres of Excellence), within the military organization, the transformation implies changes of doctrines, of the force organization and structure, of the activity based on intelligence, training, education and materiel supplies, of the staff management and budgetary planning; these become main fields of transformation implementation in the military field, which is reflected, as effort and resources, at the level of all Allied Nations.

It is important to outline the role that the new Strategic Concept, adopted at the Lisbon Summit of 2010, played in NATO decisional process, as reference concerning the finality of the effort made for security, promoting the transatlantic consensus and the image of a transparent and coherent organization. The directions traced by the Strategic Concept, completed by further directives (marking the organizational resilience) represent, at the same time, a real vector for the orientation of the transformation tasks of the defense structures and capabilities possessed by NATO states.

²⁰⁵ The transformation, as understood by John J. Garstk, means a sustained, coherent change pursuing to achieve the strategic goal of creating or maintaining an advantage in a competition or of annihilating the advantage of a new or of an already existing opponent. The concept is relevant for the organizations facing challenges and opportunities that cannot be actually approached by the established methodologies, in order to bring incremental improvements to organizations, processes, technologies, human resources management and to the existing business patterns. (Garstk, 2005)

In this system, the major role in the transformation process, at military level, is further played by ACT. Within the Transformation Network, all components of education and training, standardization, lessons learned and experimentation (pillars of transformation and, at the same time, fundamental directions of development of the work program within the Centres of excellence) are internal fields of interest which generate a series of initiatives within the Alliance with the purpose of implementing the provisions of the new NATO Strategic Concept and the NATO summits.

Still, the Alliance capabilities to implement these requirements are relatively limited, especially those related to education and training. In this context, it is expected that the role of NATO Centres of Excellence increase exponentially, as they have both the capacity and the flexible legal framework to respond to the requests for support addressed by NATO commands during the transformation process.

The brief presentation of the functional forms describing the Centres supports the effort of underlining both several aspects related to the geography and political reasons of the participation of the contributing nations to these Centres and the capabilities they have, the areas of interest for which the resources are used, the perspectives of inter-institutional cooperation and the general relevance that these aspects provide to the statute conferred to these Centres.

The present paper proves that, by their activity, the NATO Centres of Excellence aim to become the main agents of transformation in the fields of expertise corresponding thereto by the development, promotion and implementation of policies, by concepts and new strategies to the end of obtaining a qualitative development of the operational capabilities and of achieving the interoperability goals established.

The products of the Centres of Excellence comply with the end purpose of the NATO transformation process: improved capabilities, increased interoperability and strengthening of the shared common values, all aligned with the strategic vision and development policies of the Alliance.

It is important to take into account that the fields of transformation in NATO will thus display a distinctive mark of the nations enlisted in the Centres. In this line, a broad participation and representation among the Centres of Excellence will ensure an increased acceptability and legitimacy of their products, equally representing and opportunity which allows the manifestation of values, of the experience gained, of good practices and lessons learned by nations.

It may be observed a great variety of specialties approached by the Centres of Excellence, as their ultimate goal was to support the NATO transformation process, consisting in the development of specific capabilities necessary to ensure the military superiority of the organization. As not all military specialties were covered, it is expected in the immediate future, that a series of NATO nations announce the initiation of the process meant to establish such new institutions, their utility for the Alliance being already a certainty.

Furthermore, there is a tendency to attract as many members among the sponsor nations as possible, a fact that – purely theoretical, considering a maximum participation for each of the Centres – creates thus an Alliance to which the Nations contribute voluntarily with resources and expertise besides those agreed, in fields of action that approach a sole final goal – security – and which prove an exceptional level of synergy ensuring a solid basis to the subsequent evolution of the organization.

Besides the fact that COEs are true ambassadors of NATO message within their own communities of interest, supporting a better deepening of the vision and role assumed internationally by the Alliance, the Nations participating to these Centres of Excellence constitute a chance of completely manifesting their own strong points and of promoting the national image.

Romania fully benefits from these opportunities, as framework and host nation of NATO HUMINT Centre of Excellence. By the quality of its products, the Centre is an exceptional promoter of the country and of the national military institution, first of all, within NATO, but also at an international level. Moreover, the presence of the Centre of Excellence has great significances locally, its positioning among the public institutions and the integration in a specific social framework generating a series of approaches of real interest for a great deal of actors.

NATO HUMINT Centre of Excellence located in Oradea proves an exceptional capacity of integration within the broad framework of the North Atlantic Alliance structural network, underlining both the strategic vision and the availability of resources necessary to meet the specific requirements.

The institution became an element of reference in the network of NATO Centres of Excellence, a pillar of knowledge development and a Centre of gravity of NATO HUMINT Community of Interest, the main provider of educational and training services pursuant to the Alliance standards and a reliable partner for NATO or Allied Nations' structures, agencies and organizations.

Last but not least, the emergence of the Centre of Excellence in the institutional framework of Oradea, the cooperation relations with the local administration and public institutions, the involvement in the social-cultural live come to complete the image of a multidimensional institution integration meant to contribute to the Centre's prestige and, at the same time, to honor the institution of the Romanian Army.

The paper comes to define a method of interdisciplinary approach of the subject represented by the NATO Centres of Excellence, as serving to the effort of pointing out the importance they have on different fields of reference.

The methodology of the paper aims to describe the main coordinates of complementarity between the geographic science and security studies, theoretical approaches specific to sciences being completed by the practical experience as head of the NATO HUMINT Centre of Excellence of Oradea, directly involved in the process of setting up the institution.

From the systemic perspective, in the content of this paper, I proposed to underline the interest of geographic science in studying the relation between the system of NATO Centres of Excellence and the host territorial systems, in parallel with security studies, focused on aspects related to the functional features of the network as a subsystem within NATO (with reference to the geopolitical effects by virtue of the field capacities and capabilities specific to each element of the structure, in part, and of the specific connections with the host nation and the participating states).

By their existence (that implies status changes of the territorial system and entails functional relations with other organizations of the formal and informal institutional framework) and by the products and services supplied (indicators of position in the network systemic development), the Centres of Excellence become the object of study both as a whole (network) and as individual, singular subjects. The paper's approach was oriented in this way, starting from the causal factor – the need of transformation in the institutional spectrum and of NATO capabilities, describing the elements contributing to this process and continuing with the analysis of the effects implied by the decisions of improving this framework – the establishment of NATO Centres of Excellence.

The case study represented by the NATO HUMINT Centre of Excellence from Oradea focused on defining the status variables, the functional and relational processes, the interactions and the potential provided by the host territorial system.

Starting from all these aspects, I consider this paper may prove utility from different points of view, both by providing a theoretical and practical pattern of institutional evolution with implications in the domain of human geography, and by shaping some relational reference points meant to contribute to the multidimensional integration within the local community.

In this respect, I would like to underline a series of aspects that I consider relevant and by which the present paper is bestowed more value:

1. It illustrates structural and functional aspects of transformation in NATO, contributing to the promotion of multiple aspects of this process to the civil society and scientific environment. By this endeavour, it is a way to publicize the effort made by the Alliance in this respect, ensuring a necessary openness towards the interested public – especially in the academic environment, but also within the community of the institutions existing in the field of national security.
2. It serves to a better understanding of the phenomenon of NATO Centres of Excellence, of their place and role in the process of transformation and organizational resilience, contributing to the operational implementation of this concept for the human geography. Hence, as I have shown in the content of this paper, this subject – corroborated with other realities of these days, may be the object of some extensive studies related to the institutional function within certain territorial systems (for example, in the border areas), or as case studies concerning their impact and relevance within the local communities.
3. It provides an analytical approach of the geopolitical substrate and of international relations concerning the involvement of the nations within the network of NATO Centres of Excellence, contributing to the shaping of the communities of interest on functional areas within the Alliance. The approach of these communities from the historical perspective may reveal a series of interests and traditional connections, based on the security realities of the geographical support from which the nations benefit. At the same time, the prospective study of their evolution aims to support the institutional evolution forecasts and to reveal phenomena of polarization of the capabilities displayed by the security system, constituting subjects of analysis for the political geography and geopolitics.
4. It disseminates functional aspects related to NATO HUMINT Centre of Excellence, pursuing to indicate coordinates related to the multidimensional integration in the local community and in the scientific and academic environment. This publication aims to contribute to a correct comprehension and a pertinent assessment of the institutional framework where the Centre carries out its activity, as well as to identify and exploit the common interests with other organizations – both in the national/international security field and in the academic field.
5. It provides a multidisciplinary perspective in the analysis of relevance of NATO Centres of Excellence, both based on criteria specific to human geography and from the perspective of the security studies. By this interdisciplinary approach, I aimed to discover the multitude of valences that the institutions from the security environment have it, both as a functional expression, and as a relevance within their local communities. Although the current security environment is a complex one, with a multitude of actors and a variety of threats, sometimes overwhelming, the institutional transparency (including in the security area) is a necessity and not a vulnerability. The correct use of the intelligence and of the communication means and techniques will contribute to a better institutional integration, to enhance the empathy with the local community and to find some methods of cooperation with mutual benefits.

6. The NATO HUMINT Centre of Excellence located in Oradea already represents a model and an example to follow for similar, national initiatives or even initiatives pertaining to some institutional structures of other states. The structured approach pursued by the topic proposed may also open new horizons for other entities interested, both concerning the management of such an institution and for the establishment of relations in functional fields of common interest with NATO Centres of Excellence.

From a personal perspective, the top quality position of the NATO HUMINT Centre of Excellence – the only NATO Center of Excellence hosted by Romania – is devoting years of steady efforts in support of continuous transformation and modernization of NATO's forces and capabilities, honoring the excellent work of a proud group of experts from nine nations: Romania, Czech Republic, Greece, Hungary, Poland, Slovakia, Slovenia, Turkey, and the USA.

BIBLIOGRAPHIC REFERENCES

1. ***, Allied Command Transformation Public Affairs Office (2010), *ACT, EU and Industry come together for ACT Industry Day 2010*, in <http://www.act.nato.int/multimedia/archive/42-news-stories/387-act-eu-and-industry-come-together-for-act-industry-day-2010>
2. ***, Allied Command Transformation, (2010), *Headquarters Briefing*, NAF Washington DC, in <https://transnet.act.nato.int/WISE/NATOACTRes/Training/ARNATOCComm>
3. ***, Allied Command Transformation, (2010), Web page - *Collaboration Catalogue* – Master file – NATO Unclassified version suitable for TRANSNET, updated on 11th August, in <https://transnet.act.nato.int/WISE/CollaboCat/Transforma>
4. ***, Allied Command Transformation, (2011), *ACT Collaboration with National Transformation Entities*, in <https://transnet.act.nato.int/WISE/CollaboCat>
5. ***, Allied Command Transformation, (2011), *Assessing emerging security challenges in the globalized environment*, in <https://transnet.act.nato.int/WISE/CHTIPT/Newsletter/AprilNewsI/file/WFS/CHT%20Newsletter%20-%20Edition%202%20-%20final.pdf>
6. ***, Allied Command Transformation, (2011), *Possible Think Tank Issues 2011 Onward*, in https://transnet.act.nato.int/WISE/CollaboCat/LoE1/index_html
7. ***, Articles of Association - “General Gheorghe Avramescu” Association (2011)
8. ***, C2COE, (2009), *NNEC Best Practices Handbook*, Ede – the Netherlands, July, in www.c2coe.org
9. ***, C2COE, (2010), *Command and Control in a Network Enabled Environment*, Ede – the Netherlands, August, in www.c2coe.org
10. ***, Declaration on a transformed North Atlantic Alliance issued by the Heads of State and Government participating in the meeting of the North Atlantic Council (“*The London Declaration*”), London, 6 July 1990, in <http://www.nato.int/docu/basic/txt/b900706a.htm>
11. ***, Department of Social and Cultural Anthropology, (2007), *Constructing Human Security in a Globalizing World (CONSEC)*, in <http://www.fsw.vu.nl/en/research/research-programmes/social-and-cultural-anthropology/index.asp>
12. ***, Direcția Generală de Informații a Apărării, (2009), *Infosfera* (magazine of security studies and intelligence for defense), Anul I, nr. 3, București
13. ***, Direcția Generală de Informații a Apărării, (2010), *Infosfera* (magazine of security studies and intelligence for defense), Anul II, nr. 2, București
14. ***, Document C-M(2009)0145 - *NATO Interoperability Policy*, December 2009, in [http://www.tradoc.mil.al/Standartizimi/Downloads/C-M\(2009\)0145%20\(NATO%20POLICY%20FOR%20INTEROPERABILITY%20AND%20STRATEGY\).pdf](http://www.tradoc.mil.al/Standartizimi/Downloads/C-M(2009)0145%20(NATO%20POLICY%20FOR%20INTEROPERABILITY%20AND%20STRATEGY).pdf)
15. ***, *Framework for Collaborative Interaction (FFCI)*, (2012) in <https://transnet.act.nato.int/WISE/FFCI>
16. ***, *Global Trends 2025. A Transformed World*, (2008) US Government Printing Office
17. ***, *Joint Declaration on UN/ NATO Secretariat Cooperation*, (2008), in <http://www.emg.rs/en/news/region/71702.html>
18. ***, MC 324/1, (2004), *The Military Command Structure*
19. ***, MCM-0032-2006 (2006), in <https://transnet.act.nato.int/WISE/Informatio>
20. ***, Memorandum of Association - “General Gheorghe Avramescu” Association (2011)
21. ***, Military Cooperation Division (SHAPE), *Administrative Support Package - Guidance for PjP/MD/ICI/Contact Country & Pf Staff Element Personnel (PSE) employed within the NATO Environment*, in <https://mcd.pims.org/file/1916/download>
22. ***, *Multiple Futures Project – navigating towards 2030* (Final Report), (2009)
23. ***, *Multiple Futures Project – navigating towards 2030* (Findings and recommendations), (2009)
24. ***, *Multiple Futures Project* (2009) in <http://www.act.nato.int/multiplefutures>
25. ***, *NATO 2020: Assured Security; Dynamic Engagement*, (2010) (Analysis and recommendation of the group of experts on a new Strategic Concept for NATO), in <http://www.nato.int/strategic-concept/expertsreport.pdf>
26. ***, *NATO Handbook, Chapter 2 - The Transformation of the Alliance, NATO's Defense Capabilities Initiative*, (2001), in <http://www.nato.int/docu/handbook/2001/hb0205.htm>

27. ***, Office of the Secretary of Defense, (2003), *Military transformation – a strategic approach*, (cleared for public release by Department of Defense Directorate for Freedom of Information and Security Review, 03-S-1851), 1000 Defense Pentagon, Washington, DC 20301-1000, www.oft.osd.mil
28. ***, PRNewsWire, (2010), *Technology Collaboration between IBM and NATO Allied Command Transformation*, Norfolk, in <http://www.scientificcomputing.com/news-HPC-NATO-to-Improve-Command-and-Control-with-Cloud-Technology-010311.aspx> și <http://www-935.ibm.com/services/us/cloud/>
29. ***, Protocol on the Status of International Military Headquarters Set up Pursuant to the North Atlantic Treaty, Paris, 28 august 1952, in <http://www.nato.int/docu/basicxt/b520828a.htm>;
30. ***, RTO Technical Report, (2004), *Federation Development and Execution Process (FEDEP) Tools in Support of NATO Modelling & Simulation (M&S) Programmes*, in [http://ftp.rta.nato.int/public/PubFullText/RTO/TR/RTO-TR-MSG-005///TR-MSG-005-\\$\\$\\$ALL.pdf](http://ftp.rta.nato.int/public/PubFullText/RTO/TR/RTO-TR-MSG-005///TR-MSG-005-$$$ALL.pdf)
31. ***, SACT letter to CHODs, 12 April 2010, in <https://transnet.act.nato.int/WISE/CollaboCat/Transforma/.../index.html>
32. ***, Speech in the North-Atlantic Council of ACT commander, General Stephane Abrial, *NATO Transformation*, 10th March 2010, in <http://www.acus.org/event/general-stephane-abrial-nato-transformation>
33. ***, *Strategic Comments* (2009), Volume 15, Issue 10 – December 2009 *A new strategic concept for NATO*
34. ***, *Strategic Concept for the Defence and Security of The Members of the North Atlantic Treaty Organisation*, Adopted by Heads of State and Government in Lisbon, (2010), in <http://www.nato.int/lisbon2010/strategic-concept-2010-eng.pdf>
35. ***, *Transformation Planning Guidance*, (2003), apud John J. Garstka, *Provocarea transformării*, in <http://www.nato.int/docu/review/2005/issue1/romanian/special.html>
36. ***, UN Secretary Report, (2005), "In Larger Freedom: Towards Development Security and Freedom for All", in <http://www.un.org/largerfreedom/contents.htm>
37. ***, UNDP, (1994), *Human Development Report 1994*, in http://hdr.undp.org/en/media/hdr_1994_en_chap2.pdf
38. AAP-6, *NATO Glossary of Terms and Definitions*, edition 2015
39. Akşit, Cihangir (2014) *Smart standardization: a historical and contemporary success at NATO*, in http://www.nato.int/cps/en/natohq/topics_69269.htm
40. Aybet, Gülnur, (2010), *A tale of one summit: NATO's new Strategic Concept*, 25 November, in http://www.todayszaman.com/news-227845-a-tale-of-one-summit-natos-new-strategic-concept-by-gulnur-aybet*.html
41. Bari, Ioan, (2003), *Probleme globale contemporane*, București, Editura Economică
42. Bell, Robert, (2005), *NATO's transformation scorecard*, in <http://www.nato.int/docu/review/2005/issue1/romanian/summaries.html>
43. Beucher, Stéphanie, Reghezza, Magali, (2005), *La Géographie: pourquoi? comment? Objets et démarches de la Géographie d'aujourd'hui*, Hatier, Paris
44. Binnendijk, Hans, Hoon, Geoffrey, (coord.), (2010), *Affordable Defense Capabilities for Future NATO Missions*, Special Report of Centre for Technology and National Security Policy, National Defense University, USA
45. Bodocan, Voicu, (1997), *Geografie politică*, Editura Presa Universitară Clujeană, Cluj-Napoca
46. Bumbuc, Ștefania (2014) *The internationalization of higher education in Land Forces Academy from Sibiu*, in Revista Academiei Forțelor Terestre Nr. 1 (73)/2014, *Social-Behavioural Sciences section*
47. Burwell, Frances, Gompert, David, Lebl, Leslie, Lodal, Jan, Slocombe, Walter, (2006) *Transatlantic Transformation: Building a NATO-EU Security Architecture*, Policy Paper - the Atlantic Council of the United States, March, in http://www.acus.org/docs/0603-Transatlantic_Transformation.pdf
48. C-M(2009)0056 NATO Standardization Organisation (NSO) Charter
49. CMDR COE Customer Catalogue of services, <http://cmdrcoe.org/>
50. Cocean, Pompei, (2005), *Geografie regională – evoluție, concepte, metodologie*, ediția a II-a revăzută și adăugită, Editura Presa Universitară Clujeană, Cluj-Napoca
51. Cornish, Paul, (2006), *EU and NATO: Co-operation or Competition?*, European Parliament, Directorate-General for External Policies of the Union, in http://www.chathamhouse.org.uk/files/3379_nato_eu.pdf
52. Costachie, Silviu, (2004), *Geografie politică – o nouă abordare*, Editura Universității din București
53. Cox, Michael, (2005), *Beyond the West: Terror in Transatlantia*, Europeans Journal of International Relations

54. Davis, Paul, (2010), *Military Transformation? Which Transformation, and What Lies ahead?*, RAND Corporation, in www.rand.org
55. DCOS SACT, HCOE (2015) *Memorandum of Agreement between NATO HUMINT COE and Headquarters Supreme Allied Command Transformation concerning The Appointment of NATO Human Intelligence Centre of Excellence as the Department Head for Human Intelligence Education and Training*, 02 September
56. Debié, Frank, (1995), *Géographie économique et humaine*, OUF, Paris
57. Denmark, Abraham, (2010), *Contested Commons: The Future of American Power in a Multipolar World*, ed. Abraham M. Denmark and Dr. James Mulvenon, Report by the Centre for a New American Security
58. Dincă, Marian, Simion, Eduard, Kis, Alexandru, (2011), *The new NATO strategic concept – between the global security and the human security*, în *Romanian Journal of Security Studies*, vol. 1, no. 2, winter 2010, *NATO perspectives on European Security*, pp. 5-19, University of Oradea, Institute of Euroregional Studies, C&A Publishing
59. Dionisă, Ioan, (1977), *Bazele teoretice și metodologice ale geografiei*, Editura Didactică și Pedagogică, București
60. Dukes, Simon, (2008), *The future of EU-NATO Relations : a case of mutual irrelevance through competition*, Journal of European Integration, Volume 30, Issue 1, March
61. Ek, Carl, (2007), *NATO's Prague Capabilities Commitment*, Congressional Research Service, The Library of Congress January 24, in <http://www.fas.org/sgp/crs/row/RS21659.pdf>
62. Eyal, J., (2010), *NATO'S Summit: Great on Presentation, Less Good on Substance*, 29 November, in <http://www.rusi.org/analysis/commentary/ref:C4CF3A186C61EB/>
63. Flournoy, Michele, Brimley, Shawn, (2009) *The Contested Commons*, U.S. Naval Institute Proceedings
64. Frunzeti, Teodor, Zodian, Vladimir, (2009), *Lumea 2009. Enciclopedie politică și militară (Studii strategice și de securitate)*, Editura Centrului Tehnic-Editorial al Armatei, București
65. Garstk, John, (2005), *Provocarea transformării*, in <http://www.nato.int/docu/review/2005/issue1/romanian/special.html>
66. Gertler, Meric, (2004), *Manufacturing culture. The Institutional Geography of Industrial Practice*, Oxford University Press
67. Gheciu, Alexandra, (2008), *Securing Civilization? The EU, NATO, and the OSCE in the Post -9/11*, Oxford University Press: Oxford
68. Graham, Evans, Richard, Newnham, (1998), *Penguin Dictionary of International Relations*, Penguin
69. Gusteritean, Costel (2015) *Implementation of CBRN operational planning support at the COE*, JCBRND Defense COE Newsletter, no. 2/2015, <http://www.jcbrncoe.cz/images/Documents/newsletter-2-2015.pdf>
70. Hanayo, Ozaki, (2006), *Amnesty Act V.S. ICC: Are Traditional Mechanisms Alternatives to Reconciliation?*, Thesis submitted to the European University Centre for Peace Studies: Vienna
71. Hiatt, Jeff, (2009), *The definition and history of change management*, in <http://www.change-management.com/tutorial-definition-history.htm>
72. Hombly, A.S., (1999), *Oxford Advanced Learner's Dictionary of Current English*, Fifth Edition, Oxford University Press
73. Howorth, Jolyon, (2003), *ESDP and NATO : Wedlock or Deadlock?*, Cooperation and Conflict
74. HQ SACT formal letter (2013) *Quality Assurance Unconditional Accreditation for Human Intelligence Centre of Excellence*, 15 October
75. HQ SACT formal letter, *Quality Assurance Unconditional Accreditation for Human Intelligence Centre of Excellence*, 15 October 2013
76. HUMINT Definition – Terminology Tracking Form 2008-0007)
77. Hye, Frank, (2005), *Demistifying transformation*, (Cuvântare a SACTREPEUR, Gl. Mr. F. Hye, la Kijkduin, Olanda, 14.12.2005), in http://www.clingendael.nl/cscp/events/20051214/speech_Hye.pdf
78. Ianoș, Ioan, (2000), *Sistemele teritoriale*, Editura Tehnică, București
79. Ilieș, Alexandru, (2003), *România între milenii. Frontiere, areale frontaliere și cooperare transfrontalieră*, Editura Universității din Oradea
80. Ilieș, Alexandru, (2010), *Euroregional cross-border cooperation premises at the eastern external border of EU. Romania – borders and borderlands*, Geography Institute of University of Gdansk-Bernardinum, Gdansk-Pelplin, Poland
81. Joint Analysis and Lessons Learned Centre (JALLC) (2015) *The JALLC Explorer*, Volume 6 Issue 1, April 2015, Lisbon, in <http://www.jallc.nato.int/products/explorer.asp#jev6i1>

82. Joint Analysis and Lessons Learned Centre (JALLC) (2016) *The NATO Lessons Learned Handbook*, Third Edition, February
83. Jolyon, Howorth, (2003), *ESDP and NATO : Wedlock or Deadlock?*, Cooperation and Conflict
84. Joyce, Mark, (2005), *Ducând mai departe agenda de transformare a NATO*, în <http://www.nato.int/docu/review/2005/issue1/romanian/art5.html>
85. Kis, Alexandru (2013) *Standardizarea disciplinei HUMINT în NATO*, în cadrul sesiunii de comunicări științifice cu participare națională organizată de Școala de Aplicație a Informațiilor pentru Apărare "General Nicolae Condeescu" și Centrul de Excelență NATO în domeniul HUMINT – "Tehnologiile mileniului al III-lea și viitorul activității de informații", ediția a III-a, București, 27 noiembrie
86. Kristensen, Hans, (2010), *NATO Strategic Concept: One Step Forward and a Half Step Back*, in <http://www.fas.org/blog/ssp/2010/11/nato2010.php>
87. Kugler, Richard, (2007), *The NATO Response Force 2002–2006: Innovation by the Atlantic Alliance*, Case Studies in Defense Transformation, National Defense University, Centre for Technology and National Security Policy, Fort Lesley J. McNair, Washington, DC
88. Kugler, Richard, Frost, Ellen (coord.), (2002), *The Global Century. Globalization and National Security*, Institute for National Strategic Studies from National Defence University, SUA
89. Lagoa, Enrique Fojón, (2010), *NATO'S military transformation: a vision from Spain*, în UNISCI Discussion Papers, January 1, (<http://www.faqs.org/periodicals/201001/1978236251.html#ixzz19KHQwb4y>)
90. Larose-Edwards, Paul, (2007), *NATO as a Trusted Partner in Civil-Military Interaction*, Discussion paper revised for the RUSI workshops Civil-Military Relations, in [www.rusi.org/.../NATO Trusted Partner in CIMIC.doc](http://www.rusi.org/.../NATO_Trusted_Partner_in_CIMIC.doc)
91. Lessem, Ronnie, Schieffer, Alexander, (2009), *Transformation Management. Towards the Integral Enterprise*, Imprint: Gower
92. Marinescu, Paul, (2011), *Managementul instituțiilor publice*, in <http://ebooks.unibuc.ro/StiinteADM/marinescu/16.htm>
93. Maulny, Jean Pierre, (2010), *New NATO Strategic Concept: a view from France*, Fridrieck Ebert Stiftung: Berlin
94. Măzăreanu, Valentin, (2005), "Inteligență" în business intelligence, Analele Științifice ale Universității „Alexandru Ioan Cuza” din Iași, Tomul LII/LIII Științe Economice 2005/2006, in [http://anale.feaa.uaic.ro/anale/resurse/54_Mazareanu_V - "Inteligența" in Business Intelligence.pdf](http://anale.feaa.uaic.ro/anale/resurse/54_Mazareanu_V_-_Inteligența_in_Business_Intelligence.pdf)
95. McNamara, Sally, (2010), *NATO Summit 2010: Time to Turn Words Into Action*, in <http://www.heritage.org/Research/Reports/2010/12/NATO-Summit-2010-Time-to-Turn-Words-Into-Action>
96. Nadler, David, Tushman, Michael, (2003) quoted in Oliver Wyman, *The Congruence Model. A Roadmap for Understanding Organisational Performance*, Delta Organisation & Leadership, in http://www.oliverwyman.com/ow/pdf_files/Congruence_Model_INS.pdf
97. NATO Military Police Centre of Excellence/ Education & Training, 2016 Course Catalogue, v. 1.1, Bydgoszcz, Poland, in <http://www.mpcoe.org/index.php/ct-menu-item-7>
98. NATO Public Diplomacy Division (2016) *The Secretary General's Annual Report 2015*, Brussels, in http://www.nato.int/cps/en/natohq/opinions_127331.htm?utm_medium=email&utm_campaign=NATO%20Secretary%20Generals%20Annual%20Report%202015&utm_content=NATO%20Secretary%20Generals%20Annual%20Report%202015+CID_a32e91bd550957588b6313a80e7933be&utm_source=Email%20marketing%20software&utm_term=The%20full%20report%20is%20available%20online
99. NATO Public Diplomacy Division, (2002), *Prague Summit Declaration*, 21 November
100. NATO Public Diplomacy Division, (2005), *Security through Partnership*, Brussels, in <http://www.nato.int/docu/sec-partnership/sec-partner-e.pdf>
101. NATO Public Diplomacy Division, (2006), *Berlin Plus Agreement*, 21 June
102. NATO Public Diplomacy Division, (2010), *NATO 2020: assured security; dynamic engagement. Analysis and recommendations of the Group of Experts on a new Strategic Concept for NATO*, 1110 Brussels – Belgium, în www.nato.int/ebookshop
103. NATO School Oberammergau, (2011), *Course guide and POI*, in <https://www.natoschool.nato.int/academics.asp>
104. NATO Standardization Agency, (2008), *AAP-6 - NATO Glossary of Terms and Definitions*, in <http://www.fas.org/irp/doddir/other/nato2008.pdf>
105. NATO, HQ SACT (2016) *Strategic Foresight Analysis 2015 Update Report*

106. NATO's Strategic Commanders, (2004), *Strategic Vision: The Military Challenge*, in <http://transnet.act.nato.int/WISE/cap/scpi/StrategicV/StrategicV/file/WFS/stratvis0804.pdf>
107. Neguț, Silviu, (2008), *Geopolitica – universul puterii*, Meteor Press, București
108. Neguț, Silviu, (2011), *Geografia umană*, Editura Academiei Române, București
109. Neguț, Silviu, CUCU, Vasile, VLAD, Liviu Bogdan, (2004), *Geopolitica României*, Editura Transversal, Târgoviște
110. Nicaise, Guillaume, (2010), *The 2010 NATO strategic concept: What are the divergent interests between USA and France*, University of London, 15 sep, in <http://www.guillaumenicaise.com/NATOandESDP.pdf>
111. Noetzel, Timo, OROZ, Adrian, (2010), *There's Life in the Old NATO Yet*, în <http://www.isn.ethz.ch/isn/Current-Affairs/ISN-Insights/Detail?lng=en&ots627=fce62fe0-528d-4884-9cdf-283c282cf0b2&id=124380&contextid734=124380&contextid735=124379&tabid=124379>
112. North Atlantic Treaty Organization, HQ SACT, *Framework for Future Alliance Operations*, Norfolk, in <http://www.act.nato.int/ffao-report-2015>
113. Papic, Marko, (2010), *NATO's lack of a strategic concept*, în http://www.stratfor.com/weekly/20101011_natos_lack_strategic_concept
114. Patel, Avnish, (2012), *NATO's New Strategic Concept and Missile Defence*, in <http://www.defpro.com/daily/details/685/>
115. Petrea, Dan, (2005), *Obiect, metodă și cunoaștere geografică*, Editura Universității din Oradea
116. Petrescu, Stan, (2007), *Despre Intelligence. Spionaj-contraspionaj*, Editura Militară, București
117. Popa, Nicolae, (2006), *Frontiere, regiuni transfrontaliere și dezvoltarea regională în Europa Mediană*, Colecția Terra, Editura Universității de Vest, Timișoara
118. Pryce, Paul (2015) *Neglecting NATO's Knowledge Dynamic*, in <http://natoassociation.ca/neglecting-natos-knowledge-dynamic/>
119. Răileanu, Constantin, (2005), *Transformarea NATO din perspectiva ACT*, in *Gândirea Militară* no.2/2005, editată de Statul Major General al Armatei României/edited by the General Staff of the Romanian Army
120. Remaly, Steward E., (2011), *NATO transformation: finding relevance in coping with the asymmetric threat of terrorism*, USAWC Strategy Research Project, U.S. Army War College, Carlisle Barracks, Pennsylvania, in <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ada424248&Location=U2&doc=GetTRDoc.pdf>
121. Riecke, Henning, (2005), *Nevoia de schimbare*, in <http://www.nato.int/docu/review/2005/issue1/romanian/summaries.html>
122. Ron, Martin, (2002), *Institutional approaches in economic geography*, in *A Companion to Economic Geography*, edited by Eric Sheppard and Trevor J. Barnes, in http://www.blackwellreference.com/public/tocnode?id=g9780631235798_chunk_g97806312357986
123. Rynning, Sten, (2005), *NATO's Response Force: does it have the capacity to transform NATO's force structure?*, Paper presented at the annual meeting of the International Studies Association
124. Scheffer, Jaap de Hoop (NATO Secretary General), KI-MOON, Ban (UN Secretary-General), (2008), *Joint Declaration on UN/ NATO Secretariat Cooperation*, 23 September, New York, in <http://streitcouncil.org/uploads/PDF/UN-NATO%20Joint%20Declaration.pdf>
125. Simion Eduard (2014) *Centrul de Excelență NATO în domeniul HUMINT și aderarea României la Alianța Nord-Atlantică*, în revista INFOSFERA (revistă de studii de securitate și informații pentru apărare editată trimestrial de Direcția Generală de Informații a Apărării), anul VI, nr.4/ 2014
126. Simion, Eduard (2013) *Centrele de Excelență NATO și transformarea Alianței Nord-Atlantice*, Editura Universității din Oradea
127. Simion, Eduard, (2009), *A quantum leap in NATO educational and training system: the Centres of Excellence*, The 15th International Conference – "The Knowledge-Based Organization" 2009, "Nicolae Bălcescu" Land Forces Academy Publishing House, Sibiu
128. Simion, Eduard, (2010), *NATO Centres of Excellence Network and Alliance's transformational features*, The 16th International Conference – "The Knowledge-Based Organization" 2010, "Nicolae Bălcescu" Land Forces Academy Publishing House, Sibiu
129. Simion, Eduard, (2012), *A view on the integration of NATO HUMINT Centre of Excellence from Oradea in the local institutional landscape*, in *Revista Română de Geografie Politică/ Romanian Review on Political Geography*, Year XIV, no. 1/ May, Article no. 141101-239, pp. 5-17

130. Simion, Eduard; Kis, Alexandru (2015) *The NATO HUMINT Centre of Excellence as Department Head for Human Intelligence education and training in NATO*, pp. 92-101, in the proceedings of the 10th Scientific Conference with international attendance organized by the Regional Department of Defense Resources Management Studies "Defense Resources Management in the 21st Century", National Defense University „Carol I”, Regional Department of Defense Resources Management Studies, November 13th 2015, Brasov, *Coordinators:* Assistant Professor, PhD Maria CONSTANTINESCU; University Lecturer, PhD Brîndușă Maria POPA, National Defense University, „Carol I” Publishing House Braşov
 131. Somov, Yuri, (2010), *NATO's new strategic concept*, RIA NOVOSTI, 5th May, in <http://en.rian.ru/analysis/20100519/159081993.html>
 132. Stanhope, Mark, (2005), *Intervi*, în *NATO Revie* nr. 1/2005, in http://www.nato.int/docu/review/2005/issue1/english/interview_a.html
 133. Stiglitz, Joseph, (2008), *Mecanisme globalizării*, Editura Polirom, Bucureşti
 134. Transformation Network Branch, *NATO Centres of Excellence Catalogue*, ed. 2016
 135. Wedge, Tony, (2011), *NATO Centre of Excellence Establishment Manual (Version 2.0)*, Headquarters Supreme Allied Commander Transformation, Transformation Network Branch, in <https://transnet.act.nato.int/WISE/COE/COEESTABL/TheCOESta/file/WFS/NATO%20COE%20Establishment%20Manual%20Ver%202.0.pdf>
 136. Wyman, Oliver, (2003), *The Congruence Model. A Roadmap for Understanding Organisational Performance*, Delta Organisation & Leadership, in http://www.oliverwyman.com/ow/pdf_files/Congruence_Model_INS.pdf
 137. Zein, Mostafa, (2010), *NATO: A New Strategic Concept and Many More Wars*, 20th November, in <http://www.daralhayat.com/portalaricendah/204778>
- ***
138. http://www.hrad.cz/president/Havel/speeches/2002/1905_uk.html, consulted in 2010
 139. http://cmdrcoe.org/menu.php?m_id=18
 140. <http://dexonline.ro/definitie/informa%C8%9Bie> consulted in 2011
 141. http://ec.europa.eu/education/policy/higher-education/bologna-process_en.htm
 142. http://en.wikipedia.org/wiki/List_of_intelligence_gathering_disciplines, consulted in 2011
 143. <http://hdr.undp.org/en/reports/global/hdr1994/chapters/> consulted in 2010
 144. <http://managementconsultingcourses.com/Lesson35OrganisationalCulture.pdf>, consulted in 2011
 145. <http://milengcoe.org/>, consulted in 2010
 146. <http://nso.nato.int/nso/nsdd/CommonList.html?runQ=no>
 147. <http://www.aco.nato.int/page349011837.aspx>, consulted in 2011
 148. <http://www.aco.nato.int/resources/1/EXERCISES%20ACO%202010.pdf>, consulted in 2010
 149. <http://www.act.nato.int/global-programming>
 150. <http://www.act.nato.int/organization/hq-sact/mission>, consulted in 2012
 151. http://www.adevarul.ro/locale/oradea/oradea-adevarul_de_seara-nato-spioni-eduard_simion-luciano_zapatta-humint_0_226177558.html, consulted in 2010
 152. <http://www.animv.ro/ro/index.php?ccs=30> consulted in 2010
 153. <http://www.bg10ge.forter.ro/istoric%20bataliUNI%2052ge.html>, consulted in 2012
 154. <http://www.c2coe.org/beta/index.php> consulted in 2010
 155. <http://www.caspoa.org/>, consulted in 2011
 156. <http://www.ccdcoe.org/>, consulted in 2011
 157. <http://www.ccdcoe.org/12.html>, consulted in 2011
 158. <http://www.cimic-coe.org>, consulted in 2011
 159. <http://www.clujarm.ro/>, consulted in 2012
 160. <http://www.coec-ied.es>, consulted in 2011
 161. <http://www.COECsw.org>, consulted in 2011
 162. <http://www.coe-cwo.org>, consulted in 2011
 163. <http://www.coedat.nato.int>, consulted in 2011
 164. <http://www.coemed.hu>, consulted in 2011
 165. <http://www.courrierinternational.com/breve/2010/03/17/l-otan-ouvre-un-centre-de-formation-d-espions-dans-lescarpates>, consulted in 2010
 166. <http://www.dotmlpfi.com/dotwhat.html>, consulted in 2010
 167. http://www.dresmara.ro/index_en.html?id=en103
 168. <http://www.eguermin.org>, consulted in 2011

169. <http://www.ehea.info/article-details.aspx?ArticleId=3>
170. <http://www.enqa.eu/index.php/about-enqa/enqa-in-a-nutshell/>
171. <http://www.esc.mfa.lt/index.php?1624798626>, consulted in 2011
172. http://www.facebook.com/NATO.ACT?v=app_4949752878, consulted in 2011
173. <http://www.fas.org/irp/doddir/army/miotc/ttbaxx01.htm>, consulted in 2012
174. <http://www.gandaculdecolorado.com/america/4-america/1218-coala-secret-de-spioni-nato-din-romania>, consulted in 2010
175. http://www.hellenicnavy.gr/nmiotc/index_en.html, consulted in 2011
176. http://www.international.gc.ca/nato-otan/partners-partenariats/index.aspx?menu_id=48&menu=R&menu=L, consulted in 2011
177. <http://www.jallc.nato.int/>, consulted in 2012
178. http://www.jallc.nato.int/organization/mission_role_tasks.asp
179. <http://www.janes.com/articles/Janes-Defence-Weekly-2010/NATO-inaugurates-HUMINT-centre.html>, consulted in 2009
180. <http://www.japcc.de>, consulted in 2011
181. <http://www.jcbrncoe.cz>, consulted in 2011
182. <http://www.jfcom.mil/about/priorities.htm>, consulted in 2011
183. <http://www.jftc.nato.int/>, consulted in 2011
184. <http://www.jwc.nato.int/>, consulted in 2011
185. <http://www.jwc.nato.int/article.php?articleID=234>, consulted in 2010
186. <http://www.lefigaro.fr/international/2010/05/05/01003-20100505ARTFIG00612-les-eleves-espions-de-l-otan-font-leur-nid-en-transylvanie.php>, consulted in 2011
187. <http://www.mae.ro/en/node/6038>, consulted in 2010
188. <http://www.mpcoe.org/index.php/ct-menu-item-7>
189. <http://www.msc-les.org/mscoe/>, consulted in 2011
190. <http://www.mwcoe.org/?subpageid=52>
191. http://www.nato.int/cps/en/natohq/topics_49206.htm
192. http://www.nato.int/cps/en/natohq/topics_69277.htm
193. http://www.nato.int/cps/en/natolive/official_texts_27433.htm, consulted in 2012
194. http://www.nato.int/cps/en/natolive/topics_52092.htm?, consulted in 2012
195. http://www.nato.int/cps/en/natolive/topics_54644.htm, consulted in 2012
196. http://www.nato.int/cps/en/natolive/topics_68372.htm, consulted in 2012
197. http://www.nato.int/cps/ic/natohq/topics_68372.htm
198. <http://www.nato.int/docu/rdr-gde-prg/rdr-gde-prg-eng.pdf>, consulted in 2012
199. <http://www.nato.int/docu/review/2003/issue3/english/military.html>, consulted in 2018
200. <http://www.nato.int/docu/update/2006/04-april/e0427c.htm>, consulted in 2018
201. http://www.nato.int/issues/education_and_training/index.html, consulted in 2009
202. <http://www.nato.int/issues/exercises/index.html>, consulted in 2010
203. <http://www.nato.int/issues/npg/index.html>, consulted in 2011
204. <http://www.nato.int/lisbon2010/strategic-concept-2010-eng.pdf>, consulted in 2010
205. <http://www.natohcoe.org/hcoe-a-z/mission-and-vision/>
206. <http://www.natohcoe.org/organisational-chart/>
207. <http://www.nc3a.nato.int/Pages/default.aspx>, consulted in 2011
208. <http://www.nciss-nato.it/about/home.htm>, consulted in 2011
209. <http://www.ndc.nato.int/>, consulted in 2010
210. <http://www.ndu.edu/CTNSP/index.cfm?type=section&secid=77&pageid=1>, consulted in 2011
211. <http://www.nspcoe.org/about-us/history/nato-sp-coe>
212. <http://www.nurc.nato.int/>, consulted in 2011
213. <http://www.pfpconsortium.org/>, consulted in 2011
214. <http://www.rta.nato.int>, consulted in 2011
215. <http://www.secondfleet.navy.mil>, consulted in 2011
216. <http://www.stratcomcoe.org/history>
217. http://www.umtha.com/change_management.html, consulted in 2012
218. <http://www.worldwar2.ro/arr/?language=en&article=97>, consulted in 2010
219. <http://www.ziuaveche.ro/top-secret/armata-2/nato-inaugureaza-un-centru-de-spionaj-la-oradea-8759.html>, consulted in 2010

- 220. https://en.wikipedia.org/wiki/Multinational_Centre_of_Excellence_for_Mountain_Warfare
- 221. <https://eod.mosr.sk/>, consulted in 2011
- 222. https://jadr.act.nato.int/ADL_Courses/, consulted in 2011
- 223. <https://nllp.jallc.nato.int/cmmt/Pages/Communities.aspx>
- 224. <https://nllp.jallc.nato.int/lla/coellw/Pages/NATOCOELLWorkshop.aspx>
- 225. <https://nllp.jallc.nato.int/Pages/default.aspx>
- 226. <https://transnet.act.nato.int/WISE>, consulted in 2011
- 227. <https://transnet.act.nato.int/WISE/ACTIPT/JOUIPT>, consulted in 2011
- 228. <https://transnet.act.nato.int/WISE/COE/COE>, consulted in 2011
- 229. https://transnet.act.nato.int/WISE/COE/HUMINT/index_html, consulted in 2011
- 230. <https://transnet.act.nato.int/WISE/COE/Individual/TNCC/CentresofE/HUMINT>, consulted in 2011
- 231. <https://transnet.act.nato.int/WISE/CollaboCat>, consulted in 2011
- 232. https://transnet.act.nato.int/WISE/CollaboCat/LoE1/index_html, consulted in 2011
- 233. https://transnet.act.nato.int/WISE/TNCC/CentresofE/TNCC/CentresofE/MS/index_html, consulted in 2011
- 234. <https://www.cia.gov/>, consulted in 2012
- 235. <https://www.natoschool.nato.int/>, consulted in 2012